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For the Ohio Cultivator.

On Breeding Horses.

The practice too common, of breeding to unsound stallions of any breed, is to be deplored. Any *constitutional unsoundness* is an objection, and it is quite as important to avoid animals of *bad temper*, for no horse will train as well, either for traveling or running, whose disposition is not good. Many a race has been lost, not for any lack of speed or bottom, but by the bad start effected, owing to bad temper. And more especially is a good disposition to be commended for harness horses, for every day use. No matter how fine a horse is, if he is vicious he is worthless as a family horse; and farmers generally in Ohio, cannot afford to keep horses that cannot be used for general purposes. If this be true, then a good disposition is of the first importance.

Mr. Ladd would have us believe that there was very little certainty in breeding a thorough-bred, capable of running creditably on the turf, and also seems to think the blood horse has degenerated. The following extract, written by one whose opinions are worthy of attention, seem to the point: "It has been imagined that the breed of racing horses has lately very considerably degenerated. This is not the case. Thorough-bred horses were formerly fewer in number, and their performances created greater wonder. The breed has now increased twenty-fold, and superiority is not so easily obtained among so many competitors. If one circumstance could, more than any other, produce this degeneracy, it would be our absurd and cruel habit of bringing out horses too soon, and the frequent failure of their legs before they have come to their full power." A well known writer says: "We believe that it is by a *judicious* cross with the *thorough-bred* horse, that the greatest improvement is to be made with *a class* of our common mares, in breeding animals with style, speed, and above all, *bottom*, for the carriage, the buggy and the saddle; and because we believe in the principle that *like produces like.*" A great many object to the blood horse on account of his size, and they often say that he does not *weigh enough*. For the bene-

fit of such I quote from the late H. W. Herbert, (Frank Forrester,) "For not only is it not true that speed alone is the only good thing desirable from blood, but something very nearly the reverse is true. It is nearly the *least* good thing. That which the blood horse does possess is a degree of strength in his bones, sinews and frame at large, utterly out of proportion to the size or apparent strength of that frame. The texture, the form and the symmetry of the bones,—all in the same bulk and volume,—possess double, or nearly four-fold, the elements of resistance and endurance in the blood horse that they do in the cold blooded cart horse. The difference in the form and texture of the sinews and muscles, and in the inferior tendency to form flabby, useless flesh, is still more in favor of the blood horse. Beyond this, the internal anatomical construction of his respiratory organs, of his arterial and venous system, of his nervous system, in a word, of his constitution generally, is calculated to give him what he possesses, greater vital power, greater recuperatory power, greater physical power in proportion to his bulk and weight, than any other known animal—added to greater courage, greater endurance of labor, hardship, suffering—in a word, greater (what is called vulgarly) game or pluck, than will be found in any other of the horse family." If this be true, and we have no reason to doubt it, then it is of the first importance to get as much blood as possible into our horse stock. To accomplish this, those who are not able to buy thorough-breds should do the next best thing, breed their best mares to thorough-bred sires; this is *breeding up*, and is the only sure and safe way to accomplish their object: the getting of superior horse stock. The only horses in Europe capable of standing the long runs on their hunts, is an animal nearly if not quite thorough-bred. The best coach horses are those having quite a large infusion of blood, and we are told that the stage companies in England were enabled to increase the distance of their stage stations, by reason of the ability of the blood horse to go the distance at a greater rate of speed than that of any other. I am indebted to Herbert for the following rules:

1st. The most valuable horses are the most economical for all purposes.

2d. The more "blood" compatible with the size required, the better,—the high-bred animal having greater *quickness, strength, bottom, health and vigor* of constitution, as well as *courage and pluck*,

3d. The "blood" should be on the side of the *sire;* that is, the stallion should be thorough-bred, or at least of purer blood than the mare.

4th. Choose a stallion in every respect sound, short-backed, well ribbed up, short in the saddle place and long below, with high withers, broad loins, broad chest, straight rump, a light and muscular but not beefy crest, a lean, bony, well set-on head, a bright, clear, smallish, well placed eye, broad nostrils and small ears. His fore-legs above the knee, and the hind-legs above the hock, should be long and muscular, and below these joints short and bony. The bones of the legs should be large, flat and free from excrescences—the sinews clear, straight and hard to the touch.

GEORGE W. GREGG.

Circleville, Feb., 1861.

For the Ohio Cultivator.

Shoulder Lameness.

To set about the treatment of lameness, upon scientific or rational grounds, the seat of the disease must claim our first attention. Errors are frequently committed, even by professional persons, in determining the lame limb, and also the seat of the lameness. The presence of lameness might by many persons be supposed to be a matter uncreative of doubt or difficulty, yet it frequently happens that the horse which one person declares to be lame in the foot, another will argue is lame in the shoulder.

Let us now examine the difference between foot and shoulder lameness. The first and earliest symptom of foot lameness, is pointing or advancing the foot; the symptom attracts but little notice until the sequel, which is lameness, attracts attention. The

lameness although at first but slight, becomes unremitting and severe, and without any perceptible heat or swelling. At last he finds his way to the veterinary surgeon, and examination elicits proof of inflammation of the naviclular joint.

Previous to the discovery of the above disease, it was fashionable to attribute most lameness of the fore limb to some disease of shoulder; nothing has reflected brighter light upon the seat and nature of lameness, than the discovery of navicular disease; before this was known, ignorance and indecision found a ready and secure retreat in a part so concealed from view as the shoulder joint. It would be impossible in this article to do justice in exposing the ignorance of pretenders to a knowledge of shoulder lameness; their arguments are only worthy of an antediluvian.

The symptoms of shoulder lameness are that the horse neither points with the foot of the lame limb, nor stands upon it different from the sound limb; and in trotting he displays a movement of the fore limb different from a horse lame in the foot or elsewhere. A horse lame in the shoulder, can not project the lame limb forward in a direct line without pain, but describes a circle with a sort of sweep; and in walking frequently trails the foot on the ground. In shoulder lameness, the horse will halt least when he is warmed by exercise. In foot lameness, exercise increases lameness and pain.

The wasting of the shoulder (i. e. sweeny) is laid great stress on; it is but a remote consequence of lameness which may be in the foot or leg, the wasting being loss or diminution from absorption of the fleshy fibres of muscles, in consequence of not having their natural exercise, and being kept in a state of inactivity. No two kinds of lameness have been so confounded as foot and shoulder lameness, from the fact that there is nothing to be seen to account for the lameness either in one or the other. A steady observation on our part, will alone enable us to distinguish foot lameness from shoulder lameness, hence the difference of opinion between the practitioner and would-be oracles.

There are degrees of intensity in which lameness may show itself, and the line of demarcation is so faint between lameness and soundness, that what one person declares to be lameness of the foot another claims lameness of the shoulder, and a third that he is not lame at all. So indefinite does all this render the presence of lameness in certain cases, that for every examiner to come to the same conclusion, it is hardly possible. It is these circumstances that causes so much counter swearing in horse causes in courts of justice, the legal gentlemen wondering how horsemen can hold such contrary opinions. If these learned characters would but reflect on natures vital operations, they would be more sparing in their denunciations of those who conscientiously find good reason to disagree on the cause of lameness, one with the other.

It would be impossible in this article to do justice in exposing the ignorance of pretenders to a knowledge of the subject in controversey, their arguments are not founded upon any scientific knowledge of the parts diseased, its mechanism and operations they know nothing about. In a hit-or-miss manner, discoveries are made, but the failures against their discoveries would exhibit a picture that the discoverers would not look upon with satisfaction.

T. Webb, V. S., *Zanesville.*

For the Ohio Cultivator.

Influenza in Horses.

Such is the character of influenza, that it never presents the same symptoms or any particular set of symptoms. One year it takes the form of a malignant catarrh, at another, extreme dejection and loathing of all kinds of food; this is the form the disease has mostly presented in this section. It is sometimes in the spring of the year so violent as to swell the legs and sheath to a prodigious bulk, and present the appearance of farcy. Its symptoms indicate it to be typhoid affection of the great mucus track. From the eye and nose there is a discharge. The appetite discloses a deranged stomach. The weakness demonstrates the vascular system is disturbed and the brain oppressed;

the whole body appears to be enveloped as with a mantle.

In the treatment of this disease, it is difficult to lay down any general rule; should the mouth be hot and dry, the pulse quick, the general rule applicable to fever must be observed; give veratium 20 drops in water every hour, increasing the drops moderately, say five, until the fever is abated, and the increased action of the heart allayed; as an alterative give chlorate of potash in one drm. doses every three hours, either in substance or in water, the object being to get chlorine into the blood, the potash acting on the kidneys. Give cooling injections, to extract from the bowels the extra degree of heat. As soon as all febrile symptoms disappear, tonics must be administered. My favorite and most successful tonic for this disease is, tincture of iron in two drm. doses, twice a day, oatmeal or cornmeal gruel with a little brandy, wine or good rye whisky, say about three ounces to a quart of gruel, to be given twice a day; any mucilaginous drinks would be proper at any time of the day.

In the whole management of this disease, the practitioner has to discriminate between oppression and prostration; the former requires evacuants, the other cannot.

T. Webb, V. S.

Zanesville, Feb., 1861.

Garget in Cows.

We see in some papers a variety of cures for garget. Some say they have had experience in this matter while others are hearsay witnesses.

The readers of the Plowman know pretty well what its editors have often prescribed for a cure. They have one sure remedy and they are only anxious that readers should bear the same in mind when a cow happens to be troubled with this complaint.

The garget root is the article to cure it. It is known by a variety of names. Jalap was one of the oldest names for this plant. It flourishes on any of our good soils when once introduced. It grows thriftily on our peat meadows, and rises to the height of six to eight feet. Its leaves are quite large and handsome, and its berries are purple and as large as the best currants. They are full of purple juice, and the boys always claimed the first pick of them to be used as paint for their canes and carts.

The Jalap has a large root, like a carrot: and it is the root which is valuable in this disorder of the cow's udder. Some farmers cultivate the Jalap in corners of their gardens and teach their cows to eat the roots as freely as potatoes and turnips. By slicing and mixing with the common roots they soon learn to eat the Jalap with a relish.

But farmers generally are not careful to provide remedies in such cases. They apply to a farrier, when they can find one, and he cuts off a bit of Jalap root from a large one that he has carefully laid by for such cases. In most instances a bit of the root, one inch long and half an inch in diameter, will effect a cure. The cow will eat it in case it is put in a hole made in a potato or apple.

But in case the trouble has been of long standing, and has not been attended to in season, the whole system may be infected, and may require something more than when the udder only is the seat of the complaint.

In such cases saltpetre is good to affect the whole system. Half an ounce may be given with safety at one time. Mix this with oat meal and a cow will take it without knowing much about it. This may be repeated after one week in case the first dose is not sufficient.

The question has been earnestly discussed in some of our meetings, whether the garget in the udder is a mere local affection, or whether it does not always so affect the system as to render the beef unwholesome after the cow has been fatted.

We answer that we should have no fear of this unless in cases where the owner had been grossly negligent, and had not applied the proper remedies while the complaint was local—in the udder of the cow.

Some farriers are in the practice of inserting a bit of garget root into the dewlap, cutting a slit through the skin just large enough to admit the root. We have taken this method in our own stock and found it effectual. It will often cause a temporary swelling in the dewlap as large as a boy's hat.—*Mass. Ploughman.*

Choked Cattle.—For cattle that get choked when feeding upon roots, vegetables, etc., take a small rope and tie around the smallest part of one fore leg, below the knee, drawing it very tight, and then make

the animal travel about for a time, fast enough to bear the usual weight on that foot; the pain is severe, but the relief is speedy. Take care to tie the rope in such a way, that it can be quickly taken off when the relief is obtained. S. B. G.

Farm and Live Stock.

For the Ohio Cultivator.

How Stock Choose their Pasture.

Friend Harris:—I have three pastures nearly in a row, one presents a southern face, the middle one faces the east and west, being on each side of a stream of water, and well set in many places with the best kind of grass,—but not quality. This is a pasture in the woods, the other pasture looks principally towards the north. If I put stock of any description in the woods pasture, no matter how tempting the grass may look, in less than twenty-four hours we can hear the lowing, bleathing, neighing, or squealing, according to the nature of the brute, and if somebody don't attend to them they will be out if possible, and if they are made to stay they will dwindle. But just let the fence down between them and the sunny field, and general rejoicing ensues, and let stock once get in the field, the gap may remain open a month, and they will never cross it. There is half an acre of shade and running water through it, in the sunny field, on this half acre cattle especially spend nearly half their time in hot weather, and if they are supplied with salt they come right along.

The north field has about an acre in woods in one corner, and about two acres just over the branch that faces the south; the grass on these two acres is kept very short, while on the northern portions of the field it is quite plentiful. When the sun shines and weather is a little raw, the stock may be seen by the side of the fence surrounding the sunny piece, and in hot weather you will find them up to their knees in water that is in the shade. This last remark refers to cattle; horses and sheep are satisfied with the shade, without standing in water warmed by the sun. Take it altogether, stock in this last field does tolerable well, but nothing like so well as in the sunny one.

If I want to change the stock from the north field to the south one, the nearest and most convenient route is to take them through the woods pasture, but owing to their perfect abhorrence at being confined in the woods and owing to their fixed purpose to never leave the field without they can see a prospect of being bettered, I let them into a level field on the top of the hill where they would be very content to stay, provided the gate between them and the sunny field should always be shut.

What I have stated are facts. People don't like theory much, therefore a small dose will answer.

1st. It takes the warmth of the sun combined with the fertility of the soil to produce sweet grass. 2d. Cattle love sweet grass, and shade and water in hot weather, and sunshine in cold. These remarks were elicited by reading a report some time ago of a debate about shade in pasture.

Thy friend,

Micajah T. Johnson.

Short Creek, Harrison Co., 1861.

For the Ohio Cultivator.

Cooking Feed for Stock.

Much has been said and written upon the profits of cooking feed for the different kinds of stock, without (as should be done) discriminating as to what particular kind will justify the trouble and expense which must naturally be incurred in this system of feeding. For some time past I have noticed in our different agricultural papers, articles written upon this subject which from their general character are very much calculated to mislead the minds of the public, more particularly that portion, which, from their peculiar condition in society, look to the advice and opinions of others, as the basis from which their conclusions are formed.

About three years since I purchased one of Hedges & Free's steamers and also the largest size Little Giant corn crusher, and for one winter ground the corn in the ear,

cooked the same for all my stock of horses, cattle and hogs—had large boxes made for the purpose of steaming the meal which I hoped to be able to do without mixing the meal with water, this however I found it impossible to do, as the steam would not pass through the meal sufficiently to cook it, but would escape at the sides of the box, cooking a portion of the meal on the outside, but leaving the mass perfectly dry. I then adopted the method which has been recommended by others, of filling the box about one-third full of water, and after bringing the water to boiling stirred the meal into it; but in order to make the mush in proper condition to feed to cattle and horses found it attended with a great deal of labor, without receiving any perceptible benefit to this class of stock. Hogs however did well and made rapid improvement on at least one-third less corn than is required in the ordinary method of feeding.

From this experiment it would be natural to infer that my couclusion was, that so far as relates to cooking feed for horses and cattle, *it does not pay.* But to leave the subject here without giving *reasons* for my opinion, would leave the matter as it has been in many cases heretofore,—merely an assertion as to the *effect*, without any cause. The stomach or rather the digestive organs of the different classes of animals above refered to are different in their construction, and consequently the food for sustaining life and producing flesh, in one species requires to be of a different character, or produces a more marked effect in one than the other, it is true that each are fond of almost all kinds of grain, but grain similarly prepared would in one case produce a good effect, which in an other would be more or less injurious.

I have found no kind of feed so well adapted to the stomach of the horse or cow as *chop* of cut hay, or sheaf oats and corn meal, or ship-stuff, and this mixed as dry as possible, that this could not be benefited by cooking I would not say, but I am not aware of any apparatus for this purpose now in use, which would do this as it should be done.

The hog is fond of any thing in the form of swill, and the richer this is, the more decided will be the desired effect in the increased taking on of fat, cooking in this way is attended with no difficulty, and reaches the object desired without increasing the amount of labor or expense. The crushing and cooking of the cob or either for the purpose of feeding to stock, I have always regarded as poor economy, and attended with similar results to that of mixing saw dust with meal, the *nutritive* value in one case being about equal that of the other.

There are other considerations in this matter which have an important bearing, such as the kind and quality of stock, including of course their aptitude to take on flesh, together with early maturity; also the benefit derived from stabling, etc., but as these are not included in the caption of this article, must pass them by for the present.

Xenia, O., Feb. 19th. D. McM.

For the Ohio Cultivator.

Winter Stock—Summer Soiling.

I will give you some of my thoughts on feeding stock. You doubtless have observed that a great deal of stock is very poorly kept through the winter, notwithstanding a great deal of feed is wasted. First, let every farmer have shelter for his stock and have good mangers to feed in. Take the fodder and all other rough feed and pass it through a good cutting machine, then put it into a tight box made for the purpose, and steam it untill it is perfectly soft, then mix a little corn or rye meal with it and sprinkle a little salt over it, and you have a mess that is both palatable and nutricious. Besides this, about one-fourth of the feed generally used would be sufficient and the stock would be in better condition; and the manure made by this process will be much better than that made by allowing the straw and stalks to rot on the ground. This process we think is the most profitable, and consequently the best.

Having said thus much with regard to the management of stock in winter, I will give my views on the subject of soiling stock. The stock should be confined to a yard in which a number of sheds are constructed,

provided with good racks and a plentiful supply of good water. Having the arrangements all complete, commence feeding on rye, which has been sown the previous fall, on good strong soil. Sow Hungarian grass on good ground in May; this grass makes very good feed, and stock are very fond of it, but care should be taken not to give them too much at a feed, as it is apt to founder them. Sweet corn also makes a very good feed; it should be sown in drills as early as the season will admit, about three feet apart. A plentiful supply of straw should be used for bedding, and the stock confined under the sheds, so that the manure will be under shelter.

But there are those who will say that the above plan will involve too much expense for the profit; to which I would reply, that the objection is groundless, for several reasons: First, it is a fact that can be demonstrated beyond a doubt, that a large amount of the most valuable manure can be made by this process. Secondly, this manure returned to the soil will more than pay all the expense, besides making the ground better than it was when the crop was taken off. Thirdly, one acre by this process will keep more stock and kept in better order, than ten acres of the ordinary hill pasture in the country, thus leaving a large surplus of land for other purposes.

There are thousands of acres of pasture lands in the state of Ohio, that do not pay the owner one dollar per acre a year. Now it is plain that unless the above system or some other similar system be carried out, these lands will not be worth the taxes.

R. F. HUMPHREY.

Athens Co., Feb., 1861.

For the Ohio Cultivator.

Holmes Co.—Chester White Hogs.

We have had a remarkable winter, first mud, and then hard froze, with little or no snow. The wheat is all top killed, and in all the wet land, badly frozen out. The smooth wheat was badly eaten last fall by the Hessian fly. Peach buds are safe yet. Stock looks well, and feed plenty.

I saw a piece in the *Field Notes* of Feb. 7th, asking information on hogs. I will answer in part. First, in regard to the Chester White, which is all the kind I have. They will weigh on common feed, at ten months old, 300 pounds or over; when full grown, from 600 to 700 pounds. They mature at about two years old, they will fatten readily at any age, from four weeks old and upward. They are prolific: I have one sow that has had seven litters, the whole number of pigs being 98, or an average of fourteen pigs to a litter. They generally nurse well. The balance of the questions I must leave to those that have had more experience.

R. LEWIS.

Hungarian Grass for Hay.

The Editor of the Michigan *Farmer*, publishes from *Field Notes*, Capt. Ijams' article on Hungarian Grass for Hay, as he says with a pinch of salt. The following is from a correspondent of the same paper, which rather goes against the eminent value of Hungarian hay.—ED. *Field Notes.*

EDITOR FARMER—Whilst in Illinois in the month of December, I saw many farmers feeding Hungarian hay. I made numerous inquiries as to its good qualities and its general utility. Some of the most intelligent farmers condemned it for feed when allowed to mature and ripen its seed, having been forced, by sad experience, to the same conclusions that Mr. Lyndon and others are coming to, that Hungarian Grass when allowed to mature its seed, was very dangerous feed for horses and cattle—many valuable animals have died and others ruined. It was claimed that a horse fed upon it would drink as much again water as when fed upon hay, but when cut before the seed forms, or if allowed to stand till the seed ripens, and then thrash out the seed, then the hay is harmless and as good as other grasses. The seed makes the best of chicken feed, and when ground and fed in reasonable quantities was claimed to be harmless and valuable. Many farmers who have tried the new grass had condemned and discontinued the use of it altogether.

Perhaps the above statement may save some valuable animals.

H. E. DEGARMO.

Lyons, Mich., Feb. 10, 1861.

For the Ohio Cultivator.

Stable Floor and Stanchions.

Make a raised floor by laying a 2 by 4 scantling lengthwise of the stable, two foot from the side of the stable or studding, then take 4 by 4 scantling 5 feet long, and lay one end on the floor, 2 feet 8 inches apart, fasten them and lay a floor on them lengthwise of the stable. Then take a log 8 inches in diameter, commence 16 inches from the end, and mark off two feet 8 inches for center of stanchion space, then make a 2 inch auger hole 3¼ inches from the 2 feet 8 inch marks. Make mortices 2½ inches from the 2 feet 8 inch marks, 5 inches long, then bore a three-quarter inch hole through the mortice to fasten the lower end of the stanchions, 7 inches apart. Place this bed-piece on the raised floor, 2 feet from the side of the stable, then get out a top piece 3 by 6 inches, to correspond with bed-piece, except mortices, which make 21½ inches long. Then get out the stationary stanchions and put the top and bed-piece 4 feet 6 inches in the clear. The top of the slip stanchion should fall to the right, fasten the top with a three-quarter inch pin, back of stanchion. P. S. V. R.

Ottawa Co., O.

Raising Calves.

"What are you going to do now?" asked farmer Jones, one morning as he stood looking over my fence.

"Oh," I replied, "I am trying an experiment that I saw recommended in the *Culturist*, some time since. I believe it is a good plan, and mean to try it, at any rate."

"What is that—to rear them on skimmed milk?"

"Partly," said I, "but I do not intend to keep them entirely on that."

"That is always the way with you city folks, when you go to farming; you always adopt every new notion."

"But, neighbor Jones, I lack experience, and must gain my information from every means in my power; what my reason approves, I must adopt; and then, as you know, my capital is limited, and if I can keep up my dairy business, and raise my calves, I think I shall do well."

"Well, have it your own way; but I would like to compare my calves with yours at the end of the year." So saying, my neighbor left me.

I had carefully read the article referred to, and being, as my neighbor said, a new hand at the business, I thought I could do no better than to carry out my original intentions, although a little discouraged.

I had a small lot of land near the barn yard, which I thought would be a good place for my calves to run in, as a small stream of water ran through it, and there was good green feed in the pasture. I prepared a snug pen which opened in the lot, and was careful to drive them in every night; every night and morning I gave them each two or three quarts of warmed skimmed milk, into which I had stirred sufficient middlings to make the whole about the thickness of cream. When I had plenty of milk, I gave them some at noon. One thing I will mention: I tried to teach them to drink by putting my fingers into the pail; but finding they were inclined to bite them, I introduced a corn cob, which I found answered every purpose. The calves soon learned to drink freely, and I continued the treatment until they were six months old, and I think I had reason to be pleased with the result. All this time we were making butter; while I was well aware that my neighbors could not get milk enough to use for household purposes, to say nothing of butter making. At the end of six months, I turned my calves into a fine pasture to look out for themselves, as there were a number of young ones to look after; but by this time they were so tame, that every time I went among them to salt them, they would follow me, and seemed anxious to express their pleasure at sight of a friend.

A few weeks ago, farmer Jones happened to ride round my pasture, and noticed my young stock, for the first time in a good many months.

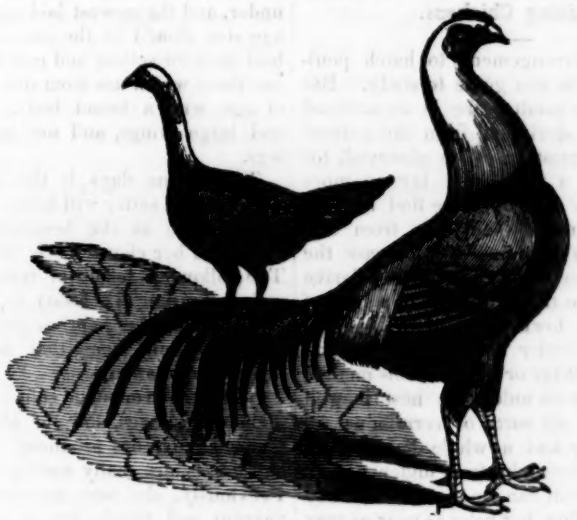
"Ah!" said he to me, "have you been buying new stock?"

"No," I replied, a little surprised at his question; "this is of our own raising."

"Indeed! why, how fine they look; I did not think you had any so old as these."

"Why, neighbor Jones, all you see here are those we raised by feeding; they will compare favorably with your own, I think."

"Yes, indeed," answered my friend, I think they will, and I really think after this, I shall try the plan myself." So saying, he rode off, and I returned home to give you the benefit of my experiment.—*California Culturist.*



SUMMATRA GAME FOWLS.

Poultry and Eggs.

By correct experiment, I find that 20 days previous to Feb. 18th, the Malacca Game hen, live weight 5 lbs., laid 18 eggs, average weight 2¼ oz. Golden Pheasant Game, live weight 4 lbs. 9 oz., laid 20 eggs, average weight 2 oz. Dominique, live weight 4 lbs. 6 oz, laid 16 eggs, average weight 1¾ oz. Irish Grey Game, live weight 5 lbs. 11 oz., laid 17 eggs, average weight 2 oz. Black Spanish, live weight 5 lbs. 12 oz., laid 20 eggs, average weight 2½ oz.

It would be no more than justice to say that the Black Spanish and the Dominiques were last years pullets. My experience goes to show that the Black Spanish have no superiors as layers, but are very sensitive to cold weather. They must have a good warm place during the winter months. They will not survive a cold snap that Games or Dominiques would easily, especially the Dominiques. They are very hardy, and one of the best varieties for the farm yard.

The Spanish will bountifully repay all trouble for protection through the winter. They are very hardy to raise when chicks, and very little trouble, with the exception of getting other hens to hatch them, for the true White-Faced Black Spanish seldom if ever set. They are very fine for the table, and bear confinement better than most other breeds, retaining the brilliancy of their plumage in health to the last.

Yours, E. Bassett.

Milan, O.

Remarks.—We are much obliged to Mr. Bassett for this report of his observations on fowls, which is very full and satisfactory. We will proceed to narrate a little of our chicken experience. A year ago last fall, we procured a pair of superb Indian Games. The hen commenced to lay in February, and brought off her first brood in March. Then some thieving scamp stole the cock, and not purposing to raise any more chicks from this hen, to keep over, we put in a golden Bantam cock, whose gallantries were very agreeable to the sable dame, and she proceeded to deposit another nest of eggs, from which she brought off a fine brood in July, which we designed for our Christmas pie, but when the time came around, wife put in a plea for the little things, saying that if they were as good as their mother, they would give us lots of eggs before spring. And sure enough, by the first of February they all went to laying like smoke, have completed their litters, and now they are clucking around as if they had done something smart, as they have. We had discharged the gallant little Bantam cock last fall, and introduced a princely, white-faced Black Spanish cock, and hen pullet. We fully agree with Mr. Bassett as to the qualities of the Spanish as layers, but for setters and nurses, we have seen nothing equal to the Games.

Raising Chickens.

In making arrangements to hatch poultry, nature is the best guide to study. But as our domestic poultry are in an artificial state, a slight deviation from the natural laws must in most cases be observed, for while fowls in a wild state lay no more eggs than they can cover, we find it more profitable to remove their eggs from day to day—for by so doing we increase the number from each, and consequently derive more profit from them. Again, in a state of nature we find fowls make their nests on the ground, or under some dry, warm and well protected ledge or bank. This method cannot be acted on unless the nest is well protected from all sorts of vermin, as we have frequently had a whole hatching of eggs stolen in the night from under a hen. The only rule that can be given is to study nature—and follow her rules as near as may be, varying to suit the particular circumstances under which you are situated. Some fowls will not often manifest a desire to set, unless a number of eggs are suffered to remain in the nest; while others will, after laying a certain number, varying from fifteen to fifty, show a desire to set longer, which is readily known by clucking, which is continued until her chicks are half-grown. In some cases, when their desire to set is not humored by giving them eggs, they will in a few days go to laying again, and in others it grows in a few days to an ungovernable passion, and they cannot be deterred from their passion, either by removing their eggs, or by the cruel practice observed by some of dousing or half-drowning them in cold water. The proper way when you do not wish to set them, is to put them in a small room or box without a nest, in which is a perch to roost on; and any fowl but an old inveterate will give over in the course of four or five days. On the other hand, when it is desired to have them set, it is best to try them with chalk or porcelain eggs for a day or two before putting under them the eggs you design for hatching, but previous to setting the fowls the nest should be examined—to be sure that it is free from lice—and fresh hay or straw should be furnished, among which it would be well to sprinkle dry wood-ashes, tobacco stems, or pennyroyal, which will serve as a preventive to their becoming lousy. The number of eggs must of course vary according to the size of the eggs and the hen—from nine to fifteen is the usual number. Be sure and not put too many under, and the newest laid eggs of the average size, should be the ones selected. The best hens for setting and rearing their young are these which are from one to three years of age, with a broad body, full feathered and large wings, and not too long in the legs.

Twenty-one days is the usual time in which a good setter will bring out her chicks, and as soon as she becomes a mother a change in her character is at once noticed. The following beautiful remarks from an eminent author (Dickson), on the maternal character of the hen, so nearly embodies what we would write, that we cannot forbear the quotation:

"The tenderness and solicitude of the hen for her little ones, and the alteration which maternal love has produced in her temper and habits, are really worthy of admiration. Previously, she was ravenous, insatiable, vagrant and timid; but as soon as she becomes a mother, she becomes frugal, generous, courageous and intrepid; she assumes, indeed, all the qualities that distinguish the cock, and even carries them to a higher degree of perfection. When we see her come into the poultry-yard, surrounded by her little ones, for the first time, she seems as if she was proud of her new dignity, and took pleasure in performing her duty. Her eyes are lively, animated and constantly on the alert; her looks are so quick and rapid that she could take in every object at one glance, and she appears to discover at once the smallest seed on the ground, which she points out to her young ones; and, in the clouds, the bird of prey she dreads for their sake; and giving them notice by a doleful cry, she induces them immediately to hide themselves under her protecting wings.

"Incessantly taken up with the welfare of her chickens, she excites them to follow her and to eat. She picks their food; she scratches the ground in search of worms, which she gives up to them; she stops now and then, she squats down, and forming a cradle as it were, with her wings, she invites her tender offspring to come and gather round, and warm themselves beneath her. She continues to bestow these cares on them till they are of no further use to them, which takes place when the chickens are quite feathered, and when they are come to half the size they are to grow to."

The first day after hatching, the chicks do not need food, and should remain in the nest. The second day they may be removed to a dry and sheltered spot, where they may be warm and not exposed to the

scorching rays of the meridian sun, and may be fed sparingly, but often, with hard boiled eggs, coarse corn meal and millet, but all watery food should be avoided. When eight or ten days old, scalded Indian meal, screenings, millet, etc., will be readily eaten. Pure water should always be at hand, in shallow vessels, and care must always be observed to keep them from the damp. When they run, it should be in a grass plot, and be kept in their coops until the dew is off the grass, for experience has shown that cold and damps, when combined, is a most fruitful source of disease in all poultry, but more especially fatal to the young. At the end of six weeks, the chickens, having become large and strong, are usually left by the hen, who goes again to laying, and will, in the course of five or six weeks, have another brood; but, as my remarks have been rather more extended than I intended, I must defer, until some future time, some other hints in regard to the management of poultry.—*New England Farmer.*

The Farm.

For the Ohio Cultivator.

Plaster for Wheat—Rolling.

In a late number of your paper I see a reference to an inquiry of mine, about the use of Plaster on Growing Crops, and if you will permit it I will say a few words about the information you pumped from J. K. Dow on this subject. He says, in using ground plaster by itself we should sow one bushel to the acre. Now I think you pumped a little too heavy in this statement, but with your permission I will give you a little of our experience in the use of plaster. We prepare our seed corn as follows, viz.: one bushel in a barrel, pour on it a pint of tar, stir until thoroughly mixed, then pour in ground plaster and stir with a stick until dry, and then plant. This mixture prevents the birds and worm from disturbing the corn after it is up; and after it is up we drop on each hill about a teaspoon full of plaster at the first time of harrowing the corn. We think this manner of treatment is of great advantage to the corn, bringing it forward faster, ripening sooner, and the grain heavier, etc., and adding one fourth to the crop.

We applied to an old Pennsylvania farmer to know the quantity to sow to the acre, he directed us to sow one peck by measurement to the acre, we did so on the 25 acre field of wheat, and the result was clearly perceptible, the wheat was about one-fourth larger and heavier than an adjoining 25 acre field on which we did not sow plaster. In the field on which the plaster was sown the wheat was all up even; in the field on which plaster was not sown, there was about one foot difference in the hight of the heads, we think the field on which was sown no plaster, was in the best condition; both fields were sown among the corn. This Pennsylvanian says if more than a peck to the acre is sown, it will keep the wheat green too long, and the rust will injure it. We realized from one-fourth to one-third more to the acre from the field that was plastured; there was about 700 bushels on the plastered 25 acres.

While I am on the subject of wheat I would say, that we have the best success in raising wheat by sowing it among the corn, leaving the corn stalks standing they protect the wheat and keep the snow from blowing off. We find that rolling wheat in the spring is advantageous: we roll as soon as the ground is sufficiently dry.

Yours truly,

E. R. Glenn.

Champaign Co., Feb., 1861.

For the Ohio Cultivator.

A Portage County Farm.

Friend Harris:—Thinking a few *field notes* from the best county in Ohio—(Portage) might be of some use to you, and having been a reader of the good old *Cultivator* from its commencement, and since Jan. 1st, 1861, *Field Notes*, which I think much better because it comes oftener,—I observe it has become frequent for people to report to agricultural papers their field operations, which I think a very good practice; therefore concluded to report my observations for 1860, and being only a young farmer it may not be as successful or as large as some others; but am old enough to know that the man reporting the first operation

stands but little chance. But here goes for for mine — farming and dairying for 1860:

My dairy consisted of 14 cows; made and sold 5,025 lbs. cheese.

Kept for family use 225 lbs; total 5,250 lbs. at 7½c ₱ lb	$393 75
Butter sold 821 lbs.; used in family 350 lbs.; 1,116 lbs. at 15¾c	181 65
Milk sold $4.64; Deacon skins $6 90	11 54
Pork, 1,800 lbs. made, one-half credited to dairy 900 lbs. at 5½c	49 50
Two calves raised	20 00
Milk of one cow for family use	40 00
	$696 00

In the above you will observe I have given the dairy the benefit of one-half the pork made. My 6 hogs, April 1st, 1860, were worth $24, and in the fall fed them 50 bushels corn; sold the above amount; kept the balance for family use.

I observed some weeks since in the *Ohio Farmer*, a communication trom Nelson of this county, in which the writer says, "for dairy purposes the pure *native* cows are much the best," and further says in another letter since "that he made from 29 cows, 9,548 lbs. cheese. Now any one wishing to learn whether native cows or others are best, can make the calculation from above figures.

My cows are all crosses with short-horn blood from one-eighth up to thorough-bred, and most of them are from half to three-fourths short-horn.

While on the subject of agriculture, I will give my whole farming operations for 1861:

My farm contains 126 acres, 35 of which consists of woods and roads, and 2 acres door yard, barn yard and garden, leaving 89 acres for farming purposes; cut the past season 10 acres of wheat, (6½ acres badly injured by the grub worm, and only yielded 9 bushels per acre,) total yield of wheat 132 bushels; 5 acres oats, 200 bushels; 9½ acres corn, (7 acres badly injured by grub worm,) total 655 bushels ears; one-half acre potatoes, 150 bushels; one-half acre corn fodder, estimated at 2½ tons; 60 loads pumpkins, and 20 bushels carrota; 200 bushels apples; 30 bushels peaches, &c., &c. Stock: 6 head horses, 20 head cattle, 6 hogs. Cut hay enough to winter all my stock and more, am wintering 6 horses and 23 head of cattle Total amount of sales:

Dairy	$696 64	
Horses, &c	250 00	
Cows	75 00	
Apples	35 00	
Hay, Corn, 8 bushels Apples, Wheat and Eggs	65 00	
Service of horse and bull	170 00	
		$1,291 64
Deduct milk, butter and cheese for family use		111 99
Total sales for 1860		$1,179 65

W. WILLIAMSON.

Ravenna, Portage Co., Feb. 25, 1861,

For the Ohio Cultivator.

A Richland County Farmer.

My farm consists of 124 acres, 84 under cultivation, balance timber. As my farm is upland, better adapted to grain than grass, I know the value of saving straw and corn fodder. My manner of saving and feeding straw is this: my wheat is well shocked after the cradle or machine, my oats are cut one day and put in shock the next day. I always look for favorable weather for oats harvest. I draw part of my grain to the barn and stack part in some field intended for corn the next spring. I sprinkle a little salt over each load as I mow it away. I thresh just before I want the barn to store fodder in, my straw is well stacked, my stock of young cattle, colts and sheep, with little grain, will winter well on it.

I top my corn, the fodder is hauled to the barn as the corn is husked, and stored to feed to horses, milch cows, calves and lambs. My hay is mostly kept for spring feed, after the straw and fodder is gone. I haul all my manure and remnants of straw stacks on the field for corn. If sod land, I plow in March. I consider March the best time to plow sod for corn.

My crops have averaged in acres the last ten years — wheat 14, corn 12, oats 9, meadow 8 acres. My stock has averaged in the same time — horses 4 head, cattle 15,

sheep 50, hogs 18. My yearly income from stock and grain has been as follows: Horses $30, cattle $110, sheep $90, corn $20, clover seed $25, other small items $80: this added together makes $775. My yearly expenses are $425, this leaves me a clear gain of $350, which I am satisfied with. I keep a book of all my income and expense, so that in referring to that I can tell where all my trade and money goes and what for.

I am one of those individuals who believe in living and letting live, I believe the farmers have a right to take their share of enjoyment and happiness as they pass along through their labor. I look upon the man that makes a slave of himself and his wife all their days, or until they are broken down in hoarding up riches, as foolish and unwise.

C. L. Cook.

For the Ohio Cultivator.

Hedges and Other Fences Compared.

I see in your paper an "Experience with Hedges," by Ezra Sherman of Watervliet. He says he has 35 years' experience in hedges, having tried the Honey Locust, the Sweet Briar, the Crab Apple, the Buckthorn and all kinds of thorns; and finally with the Osage Orange has succeeded in growing "good, reliable hedge fences;" but does not give all the facts and figures in relation to the costs, etc. It is true, as he says, that some folks offer to raise a hedge for from 50 cts. to one dollar per rod, but he has "never seen any of that kind good for any thing."

Now, Mr. Editor, we are one of those that have no faith in hedges for general fencing purposes in this wooden country of ours, and believe them to be consummate bumbugs, and all who undertake it will ultimately find themselves most egregiously fooled by waste of time and loss of labor and money.

In the first place it is utterly fallacious to plant a hedge without a ditch. If for inside fences, a ditch on either side of your hedge is indispensible, not so much for the protection of hedge as for the protection of your fields, for it is notorious with all acquainted with the Osage plant that wherever and whenever a root is cut with plow hoe or harrow, endless sprouting ensues, and so long as half an inch of root is left in the earth, so long will it sprout and throw out shoots.

As your Watervleit correspondent fails to give items as to the probable cost of a good Osage hedge, we will look at the matter a little and leave it to the experience and practice in hedge growing for the next twenty-five years to determine our accuracy.

Preparing the ground, manuring the poorer portions, etc., per rod	50 cts.
For the sets, planting and tillage per rod	50 "
Second year's cultivation, clipping, etc., per rod	25 "
Third year's cultivation, clipping, etc. per rod	50 "
Then we have for the hedge barely ready to turn stock, costing per rod	$1.75
Then add, if for inside fence, the probable cost of two ditches (3 ft. deep) each per rod 25 cts	50 "

making—to say nothing about the strip of land taken up some two rods in width, future tillage, which would be at least 25 cts. per rod each succeeding year—the price of a good hedge to start with, will cost 2.25 per rod.

Now, Mr. Editor, with an outlay of 1.50 per rod, a first rate post and board fence that will last 15 years, can be made, or a post and rail, at a cost of 1.75 per rod, "horse high, bull strong and pig tight," that hardly need be looked at for 20 years.

J. S. Leaming.

Clinton Co., Feb. 8, 1861.

Sorghum in Richland.—Among the many beautiful and good things of old Richland Co., must be reckoned the extraordinary yield of sorghum molasses, produced by Hugh Black, which simply told is just this: that from 20 rods, or one-eighth of an acre, was realized 46 gallons, being at the rate of 368 gallons per acre, worked up by Cook near Mansfield. This syrup is the clearest and the best I have anywhere seen yet, made from the sorghum. Wonder if

any county in Ohio can beat old Richland in this sugar-tree saving business? Remember she produced Cook, as well as the great crops of cane.

GABRIEL MCWILLIAMS.

Which are Most Profitable Sheep.

Discussion at the Ohio Agricultural Convention, Dec., 1860.

Dr. Townshend of Lorain, said he was not prepared to settle this question. It was not settled in his own mind. My father's flock of sheep were formerly Leicesters, but are now mostly Cotswolds. Of late, however, we are getting back to Leicesters again. Land with us is too high to devote to wool-growing, hence we raise meat and grain for market. Our flock averages about six pounds of wool per head, and this sells at from twenty-five to forty cents per pound—perhaps averages thirty-three cents. We sell our wethers at from two to three years old, and have received as much as $16 per head for those that would dress forty pounds to the quarter, when it was worth ten cents per pound in New York. Frequently sell for from $5 to $10. The wool brings about as much per fleece as fine wool, Leicester sheep make excellent mutton. The Lincolns and Cotswolds are rather large and coarse-fleshed My opinion is that for Northern Ohio, the Leicesters are better than any other. Southdowns give fine mutton, but less of it and less wool. No sheep keep well on hay alone, but all sheep pay for shelter and grain in winter.

Chester Palmer of Geauga county, said he had an experience of twenty-seven years in wool-growing. He commenced with Spanish Merino Sheep, decended from the Wells and Dickinson flock, and goes on the principle of raising those sheep that will give the greatest yield of fine wool to the acre. I selected my first flock of ewes with particular reference to their constitutional vigor, and crossed them with pure Silesian bucks. The result was, they yielded me four pounds and two ounces per head of clean wool. I raise no other. It is not fair to sell dirt for wool, and then say your sheep averaged so much wool. This year, I sheared four hundred sheep that yielded five pounds, worth fifty cents per pound. Large sheep cannot be herded in such numbers as small ones, without deterioriating in size. His experience with the French Merino sheep have satisfied him that they are not the most profitable sheep. His Spanish and Silesian sheep gave twenty-five per cent. more profit than sheep raised from his largest ewes crossed with one of Mr. Bingham's best French Merino bucks. He is decidedly in favor of the fine wool, and of a cross between Silesian and Spanish Merinos.

Mr. Chamberlain of Clark county, said he had been breeding Spanish Merinos for a number of years, and claims they have more constitution, will bear more exposure, and flock together better than any other breed. He had flocked the Longwools and the French Merinos with the Spanish, and found the latter always the best. His sixty head average six and three-fourth pounds per head. He sowed rye to pasture his ewes on at the season of lambing, and likes the practice.

Mr. Quinn of Columbiana. Fine wool with him had proved a failure. Had kept the Spanish and the Cotswold breeds, and the latter took on three pounds of flesh to one for the former. They are very quiet, eat, and lie down, while the fine-wools roam about the fields to see what they can find, and thus work off their food. Gets about twice as much for a Cotswold wether as for a Merino, and is not insulted when he takes them to market. At five months old, his long-wool lambs weigh more than fine-wool sheep ever weigh. Mr. Palmer asked if he can keep as many to the acre as of fine-wool, to which he replied in the affirmative.

Mr. Palmer thinks he can keep three fine-wool sheep where he could keep but one coarse wool.

Mr. Quinn thinks coarse wool worth more than farmers usually get for it. He usually sells his for 45 cents. He summed up by expressing the opinion that coarse wool sheep are twice as profitable as the fine.

Mr Easton of Huron county, says that those who can make most by raising wool, should grow fine-wool sheep. Those who can make most by mutton should raise the coarse-wools. This depends partly on nearness to market, and partly on the character of the country. On hilly land, fine-wool sheep do best; but he thinks in a level country the coarse-wools are preferable.

Dr. Townshend remarked that more fine-wool sheep could be kept on an acre, but the difference is not in proportion to their weight. A wether that weighs two hundred or three hundred pounds, will eat but little more than a small one. The Spanish Merino sheep is very active in its habits, runs about a great deal, and thus requires more

food than if it was quiet. The coarse breeds of sheep have good digestion, and hence convert a large portion of their food into fat. The Leicester has a splendid digestion. I think that three coarse-wool sheep will eat about the same as four of fine.—*Ohio Farmer.*

The Apiarian.

Queen. Worker. Drone.

A Talk About Bees.

Dr. Kirtland delivered a lecture on Bees at the Cleveland Medical College on the 8th of Feb., which we find reported in the *Review:*

Dr. K. said he designed giving a practical lecture, and should not enter into unnecessary scientific consideration of the bee or of its habits. The honey-bee is not a native of North America, but was introduced soon after the first settlement of the country, by Swedish, Dutch and French colonists. The first reference to it was in the travels of Peter Calm, a pupil of Linneus in 1820, who said it was common among the settlers, and that numbers escaped into the forests. Calm said it had not found its way over the Blue Mountains, or Alleghenies, as they were then called. Since his time it has extended to the barren tract in 100 degrees west longitude, but between that and the Rocky Mountaint it is not known. All that have been carried into Oregon or Washington territory have died.

From their first introduction to about 1805, honey-bees flourished without being annoyed by any enemy. About that time a depredating insect appeared, which destroyed whole apiaries. In 1806, in Connecticut, it made its appearance, and in a short time its devastations were so great that bee-keeping became unsuccessful and was almost wholly abandoned. The appearance of the bee-moth aroused inventive genius to provide some means to extricate, or prevent its ravages, and since the period of its first attacks, scarce six months have ever passed without some patent hive being offered to the bee-raiser. So little were most of them adapted to the habits of the insect, that they generally did as great or greater injury than the moth itself. No Yankee ingenuity has stopped the ravages of the bee-moth, though indirectly some applications have been of great service.

About 1853, Mr. Langstroth discovered a method of arranging a bee-hive so that everything about it was placed under the inspection of the bee-keeper, and a chance given to examine and handle its parts at pleasure. The keeper, by this arrangement, was enabled to detect and kill the moth in all stages of its development. Mr. L's hive had worked a perfect change in bee-management, and it now appears that we are entering upon a successful period in bee-raising.

Dr. K. said the first important step was to learn the art of controlling honey-bees. He did not aspire to be a Rarey, with horses, or a Van Amburgh with wild beasts, but he thought he could control the honey bee with as much ease as many could shanghai chickens. He alluded to the covering to be worn, recommended in Langstroth's book, consisting of a cylinder of wire gauze over the head, the top covered with cloth, and a cloth cape below fastened by a small ligature; on the hands india-rubber gauntlets. This to one accustomed to bees was superfluous. His only protection was a cotton handkerchief which he rolled up, and igniting let it burn in a smoke. A little of this blown in among them, they retreat to their deposits of honey, and after gorging themselves with the sweets they are harmless. In point of being good natured after dinner they are like many humans. The Dr. recommended too that bees should always be handled easily, and that much conversation while attending them disturbs them. Bees are irritated by the human breath, and they will retaliate when annoyed by it.

In a common hive there are in the neighborhood of 10,000 workers, 500 drones, and one queen. The number of workers and drones may vary somewhat, but there is never but one queen bee in a colony. The workers are females, partially developed, and are smaller in size than the drones and the queen. They do all the labor, collect the honey and the bee-bread, the latter the pollen of flowers. They are armed with a sting for defence. The working bees which were hatched last autumn, and are being wintered over, will die off about the time that apple and peach trees are in blossom.

The Dr. described the manner in which the working bees make the comb. Their stomach contains a peculiar sack, which is filled to distention from the nectar of flowers which they suck in. Little bags behind their legs are stored with bee-bread. They go into the hives and suspend themselves in a manner like festoons, hanging down similar to links in a chain. In this state they remain for six or eight hours digesting honey for comb. By a process of secretion the honey is converted, and they will project the comb out from layers of the abdomen. On examination of comb, it will be seen there are two sizes of cells, all hexagonal. The little flakes of comb are taken, and the bees like a mason plaster them together with mathematical exactness. One workman leaving his flakes, another carries on the work. The young workers, until four weeks old, do not go abroad, and they do the polishing work of the comb.

The drones are the males. They collect no honey, but are great consumers. The size of the drones is considerably larger than that of the honey-bee. Drones are often too plenty, and the Dr. suggested that in view of their size, the passage way to hives, be made five to fifty-five seconds of an inch, enabling workers to get in, but keeping them out.

The queen bee is about the drone's size, but of elongated form, something like a wasp. They are armed with a sting, yet strange as it may appear, he had never been able to irritate them enough to induce them to sting. But when queens meet each other, they engage in deadly contest. While workers live but from four to six months, the queen lives from four to six years. At the age of four years, the queen ceases to be prolific, and will have drones as a progeny, if any.

Dr. K. describes the manner in which a new queen is made, and the formation of a pendulous cell for royalty, changed by the workers from a horizontal cell. In this the larva is deposited, and the queen is fed by a peculiar secretion for food ejected by the workers. The fecundated eggs of a queen hatched into females; unfecundated into drones.

Bee bread is the feed of the old bee during the winter, and of the young for food at all times. The Dr. said unbolted rye flour had been found about as good as the pollen, though when flowers come the bees will cease using it.

In the spring, or even earlier, the queen commences depositing her eggs for spring brood. About the 10th of May, a good colony of bees will have begun to form a number of queen cells, and a swarm may soon be expected. Insects go through four stages of existence, the eggs, the larva, the pupa, and the perfect insect. The royal queen lies in the pupa state for six days, and on her change from that strange sounds may be heard in the hive. The whole colony of workers is in commotion, and they form in squads like politicians before an election. The old queen has heretofore controlled them, but now at the sound of the voice of a new queen she rushes at her cell. Platoons of workers, however guard it, and the old queen and her party finding themselves unable to contend with new royalty, leave the hive and thus a swarm is formed.

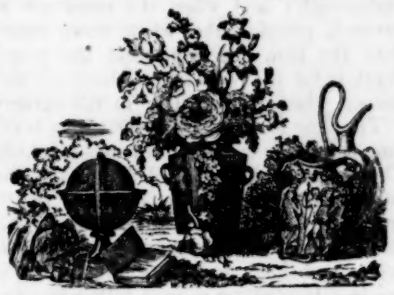
The Dr. gave suggestions as to how to treat a swarm. He advised their removal from their place of lodgement quietly and carefully, and never to use a hive which has been exposed to the sun.

The Doctor then illustrated by a hive and honey-boxes present the manner of getting out honey. He extolled the surplus honey-boxes as very convenient in enabling one to get smooth and undefaced honey.

He next treated of wintering bees. They must have a certain amount of warmth, but their abode should be kept dry and well ventilated. It was destructive to put them in an ordinary dry cellar, where decaying matter was about. An open and dry cellar was an excellent place, with quiet surrounding them. The bees should be provided with plenty of stores for the winter, the colonies kept strong, and have a good healthy queen. Where they are not strong, he would follow out the old agrarian doctrine, and rob the rich to feed the poor. From a hive with abundance of stores, he would take aid for a weaker one.

The doctor then alluded to the great advancement the past year in bee culture, and spoke of the introduction of Italian bees, of which he now had six colonies. He was much pleased with them.

He concluded by saying that people have but little idea of the amount of capital and labor expended in bee culture in Ohio. There are at least 200 colonies in every township, and estimating the number of townships to be 1,300, and the colonies worth about $6 each, and you have a value of $1,560,000. The study of this little insect was worthy the attention of all, and its habits and peculiar organization were evidences of the wisdom and benevolence of the Creator.



Editor's Table.

S. D. HARRIS, ... EDITOR.

BACK NUMBERS of the OHIO CULTIVATOR to the beginning of this year, can still be furnished to all new subscribers, and any subscriber having missed or lost any of this year's numbers, will be supplied gratis on giving us notice.

BACK NUMBERS OF FIELD NOTES cannot now be supplied to new subscribers. We started out with a surplus edition of some four thousand copies above our subscription list, but the demands of our friends have used them up, and we can only supply from a week or two back of this date, and of these only a dozen or two. New subscribers will have credit for a full year from the date of the first No. they receive.

FIELD NOTES to JAN. 1862.—In consequence of the talk of hard times and political troubles, many people failed to subscribe for their agricultural papers at the beginning of the year, who now find that they have neglected what they most need. To meet the wants of this class of people we have concluded to offer special terms, viz: For one dollar we will send *Field Notes* to any address, for the balance of this year, 1861, to begin when the subscription is received, any time from this date.

Any postmaster, club agent or any other person who will send us five subscribers and $5 for the balance of this year, will be entitled to a copy gratis, for the same time; and at this rate for any larger club. Now that the people begin to get interested in spring work, it is a good time to invite them to subscribe; and especially at the spring elections in the townships, when all the farmers can be found together. This will be a fine chance to canvass for our paper during the rest of March and all of April.

SPECIAL TERMS.—Subscriptions to *Field Notes* are still taken at only one dollar and fifty cents a year. A big paper for a little money.

THE NEXT STATE FAIR.—The people of Dayton have completed their contract for the expenses of the next Ohio State Fair, and the papers are filed in the office of the Board at Columbus, so that the thing is fully fixed, and we give the Miamis notice that we will be among them about next September.

AGRICULTURAL SOCIETIES are reminded that in arranging their premium lists for this season, they can do us a good turn, and help the cause at the same time, by a liberal sprinkle of *Field Notes* and *Ohio Cultivators* among the prizes. We will make the terms satisfactory.

For the Ohio Cultivator.

The Best Kind of Oats.

This being the season of oat sowing, it becomes every economical, careful farmer to study the quality and character of the seed he is about to sow, relative to its probable growth and future productiveness.

We have tested a good many sorts, not to be sure, on a very large scale ourself, but by careful examination of others' work, and our preference would now lead us to the Barley oat for very strong, stiff land, the Poland oat for good rich soil of a loamy clay character, and the Black side oat for soils of more sandy character, but that are nevertheless in good heart.

All these varieties produce well, and the weight of the grain is about equal, good samples of each that we have had, weighing from forty to forty-six pounds to the measured bushel. We have named the soils above, because it has been upon such that we have noticed the best success. The Barley oat on light soils, we have found did not grow strong enough to prove profitable, while the Black side oat on rich clay loam is very liable to fall, its growth overbalancing the strength of its straw.

Another item connected with this seeding of oats is the quantity of seed to the acre. Some use two bushels, others two and a half, three and up to four. We once experimented for two years, with all these different quantities, and our results were in favor of about three bushels, not less, to the acre. What say our farming friends?

F. R. ELLIOTT.

The Orchard.

The Fruit Orchard.

On procuring a lot of trees, if you have to carry them a distance, cover the roots securely with straw, or other material, to prevent drying, and immediately on reaching home, "heel them in," covering the roots with mellow earth, where they can remain some days, or till the ground is ready for planting; then take out a few at a time, so as not to expose the roots to drying.

The soil for an orchard must not be wet. Rolling or hilly land, if not too poor, is the best; but level land will do, if naturally dry, or well underdrained, so that water will not stand long on the surface, nor about the roots of the trees. If too poor to produce a good crop of corn, enrich it with rotten manure, then plow as deep as possible, and harrow well, before planting the trees.

Digging the holes in the land thus prepared, is but a small job, as they need not be much larger than sufficient to contain the roots in their natural position. But if the soil is poor or shallow, it is better to dig out a few inches more of the bottom soil, and fill it with surface earth, before setting the tree.

To prepare the tree for planting, cut off any broken parts of roots, then reduce the top, to correspond with the loss of roots, cutting off surplus branches and reducing those at the head one-half or two-thirds their length, leaving only three or four buds on each last year's shoot. This will cause a more healthy and vigorous growth the first season; and its omission is a common cause of the failure or sickly growth of newly-planted trees.

In setting, let one person hold the tree in its position, while another fills in with mellow earth, working it among the roots with the hand, taking care to leave no cavities underneath; and when the roots are all covered, pressing the whole down firmly with the foot, observing that the proper depth is for the roots to be about an inch deeper, when planted, than in the nursery.

The time for planting in the spring is any time before the opening of the blossom buds. The earth should be leveled, and the surface covered (mulched) an inch or two in depth, for several feet around with chip earth, old saw-dust, or the like, to prevent drying or baking, and check the growth of weeds. If planting is done rather late and in dry weather in spring, it is well to give water freely, after setting the trees in the holes and covering the roots with earth, letting it settle before finishing up; then if the surface is mulched, no further watering is necessary.

No grass or grain crops should be allowed to grow among fruit trees, until they have arrived at bearing size. Neglecting this precaution is the most common cause of the failure of young orchards. No farmer expects corn to flourish among the grass or other crops with no cultivation; and it is just as unreasonable to expect young fruit trees to grow well in such circumstances. The ground between the rows may be cultivated in potatoes, cabbages, beets, etc., or in corn, if not planted within six feet of the trees.

Stirring the soil, by means of a cultivator or harrow, frequently during summer, along the rows of trees, will be found of great advantage in promoting their growth, and thereby resisting the attacks of borers.

Dwarf apple and pear trees, especially, need good soil and culture. Along a garden walk is the best place for them; and a dressing of rotted manure should be placed around the roots in the fall, and forked into the ground in spring annually.

Dwarf Apple Trees.

These are becoming quite popular in

some sections, especially among amateur fruit-growers and pomologists who desire to test many varieties on limited grounds. They are small trees or bushes, very ornamental when bearing, and suited for gardens and ornamental grounds. They are also adapted to prairie lands and other situations exposed to high winds. They are produced by grafting on *Paradise* or *Doucin* (French) stock; they bear fruit very early and freely, and generally of finer quality than standard trees.

Pears.

Good pears are the best of all fruits. They can be had to suit all tastes, and adapted for nearly all seasons of the year. The pear tree is as hardy and easily cultivated as the apple, and the crop as reliable. It is also well adapted to the strong clayey soils which abound in Ohio and other western States, and where the peach and cherry often fail. Among amateurs in the more eastern States, pears are the most popular fruits — some gentlemen numbering hundreds of varieties in their collections. In Ohio, the culture of pears is extending rapidly, as is evidenced by the greatly increased demand for the trees. The soil for pears should be deep, rich and free from wet. A strong loamy soil with gravelly bottom, suits them best, but a clay subsoil is no objection, if not wet. Plentiful manuring is also found advantageous, especially for dwarf trees, and the ground must be kept stirred or cultivated around them—not left to grass.

Standard trees (on pear stocks) are best for orchard culture, and for such varieties as do not thrive well on quince, as the Bartlett, Sheldon, Flemish Beauty, Seckel and some others.

Dwarf Pear Trees.

These are produced by budding upon the Angers quince stock. They are highly productive and ornamental, but require rich soil and good cultivation; hence they are only suited for gardens and other well tilled grounds. It is also found that some kinds of pears do not thrive well on quince stock; but with a proper selection of kinds, and good culture, no trees afford more speedy and abundant compensation to their owners. They need to be trimmed pretty severely to keep them in good pyramidal shape, with low branches, and they should be annually dressed about the roots with rotted manure, to secure a thrifty growth, and bring to maturity full crops of fruit. In planting dwarf pear trees, it is recommended that they be set deep enough for the quince part of the stem to be all under ground.

Cherries.

Cherries thrive best on sandy or freestone soil; hence the Eastern and Northern parts of Ohio are more favorable than the Western and Southern. This is particularly true of the more rapid-growing sorts, as the *Heart* and *Bigarreau* class commonly called "sweet cherries." To grow these with success in the South-west, it is found necessary to check their tendency to luxuriant growth, and cause the trees to branch low, so as to shield the trunks from the sun and winds. This is best secured by using stocks of the *Mahaleb* (a kind of foreign

wild cherry,) which dwarfs the trees somewhat, and is better adapted than any other for growing in strong soils. A large portion of our trees are grafted on this kind of stocks, and are trained as dwarfs or low standards, having branches near to the ground, *especially adapting them to the soil and climate of the West* But for persons residing in other sections, or desiring tall trees, we have them of the ordinay shape. As cherry trees are more difficult than most others to transplant successfully, when large, we recommend purchasers to choose those of small size, say 1 year from bud or graft, the same as with the peach.

Dwarf Cherry Trees, especially of the finer kinds of Morellos and Dukes, are destined to become very popular at the South and West, as they are found to endure the climate perfectly. They are also highly ornamental for door-yards and gardens, bear fruit early and abundantly, and that of the finest quality. (The annexed cut shows the manner of *shortening* the branches to secure a neat dwarf form of the tree.) The Morello and Duke cherries are best adapted to this mode of training and culture.

Duke and Morello Cherries—These trees are of slower growth, and more hardy than the preceding. The Morellos have slender, spreading branches (the common sour cherry is of this class), and the fruit is juicy and acid; mostly used for cooking and preserves. The Dukes have more upright branches, and the fruit is generally larger and sweeter; some, as the *Belle d'Choisy* and *Reine Hortense*, being quite sweet. Most of them are highly productive, and profitable for market. The *Early Richmond*, or *May Cherry* of the West, is found the most hardy and productive where the soil and climate are not favorable for cherries generally.

Plums.

A stiff clay soil is found congenial to the plum, and least favorable for harboring the *Curculio*. Trees planted in a back door-yard, where the ground underneath is paved or trodden hard, and where pigs and poultry are kept, or the fallen fruit is carefully gathered up and destroyod, are most likely to escape injury.

In garden or orchard culture, the most effectual remedy is to visit the trees each morning and evening, and jar off the insects on a sheet spread beneath, and then destroy them. This should be commenced as soon as the blossoms fall off, and continued for about three weeks. Where a considerable number of trees are tended the labor is small in comparison with the value of the crop.

Peaches.

The best soil for peaches is a deep, sandy loam; but they will thrive on a clayey soil if not too stiff nor too moist. Hilly or elevated locations are the best for peach orchards, and a northern exposure the most exempt from injury by spring frosts. The peach crop is an uncertain one in most localities, but the fruit is so fine, and the yield abundant and profitable, that a single crop of an orchard has often brought a small fortune—sufficient to pay for the cost of the land as well as the trees and cultivation.

To produce fine fruit, peach trees must be kept *thrifty*, by stirring the soil, and giving manure occasionally, if poor; and the trees should annually be pruned, to secure a growth of *young wood*, which is best done by shortening the longest branches from one-third to one-half.

Apricots.

This beautiful and delicious fruit does not succeed as well in this climate as formerly; though some of the varieties are nearly as hardy as the peach and as certain a crop. In localities where the curculio is destructive, the trees should be planted near the house, by the side of a path or pavement, and managed as directed for plums.

Nectarines.

The Nectarine resembles the peach, both in tree and fruit, only the skin is smooth like the plum; and consequently it is liable to the attacks of the curculio, like that fruit, and should be managed in the same way.

Quinces.

The Orange or Apple Quince, is the only variety worth cultivating for its fruit. *Ray's Mammoth*, is a new, large variety; the *Angers* and *Upright* varieties, are used by nurserymen for stocks, and the *Japan* for ornament.

[*From the Spring Catalogue of Bateham, Hanford & Co.*

A Short Catechism.

Friend Harris:—Can thee or any of thy readers inform me where I can get Osage Orange seed, or plants suitable for setting in hedge row this spring; and as the catechism is open, I wish to ask the old nursery men and vine growers a question or two: When is the best time for grafting the

grape vine? and please tell us the proper mode of grafting, also give us your experience in regard to the proper time for budding and grafting the apple, pear, plum, peach and cherry. Wheat looks very sickly in our section since the last severe frosts.

J. F.

Clinton County, Feb. 15, 1861.

Influence of Stock on Grafted Fruit.

Discussion at Cincinnati Hort. Soc. Feb. 23.

At the meeting of the 9th inst., a member stated that he had discovered a change in the quality of the fruit from a graft inserted into a large apple tree in his orchard, and desired to hear the opinion of the members as to the influence of the sap of the stock on the graft, in bearing trees.

Shade trees were then under discussion, and the question of grafts was postponed. I now ask leave to present it at this meeting, and to give my own opinion and experience on the subject. It is well known to nurserymen, and all cultivators of fruit trees, that the sap of young stocks of the same kind had no influence on the fruit of the grafts or buds inserted into them, else there could be no certainty in propagating any variety, except by cuttings. But it is also ascertained that grafting the pear on the thorn, the quince and the apple, has in some varieties an influence, not only on the quality of the fruit, but on the size. By grafting the Seckel pear, for instance, on bearing apple trees, I have increased the size of that pear nearly double, but the quality was not so good. Twelve years ago, I budded an intensely sour apple into a Sweet Bough and a Sweet June, one bud in each; they were bearing trees, and now, after tasting the fruit for the last eight years, I can perceive no change; it is as sour as ever. Many instances of similar experiments might be given, but I prefer to listen to the statements of the experience of other members of this Society, which is now respectfully solicited.

R. Buchanan.

N. B. In the new edition of Downing, page 24, will be found an excellent article on this subject.

Mr. Pierson had faith in the theory that the stock had an influence on the graft, giving an example. He alluded to the fact that pears, when grafted upon the quince, were improved. The reason for this, to his mind, was the finer texture of the fibres of the wood of the quince. He said the Bartlett pear, grafted upon the quince, was both larger and finer.

Mr. Heaver was interested; sorry he was not in a condition to say much; of the opinion that the stock did not exert an influence upon the fruit, but regretted the fact that there had been no series of scientific experiments, from which a certain conclusion could be formed.

Mr. Blackburn said he had seen a fact reported by the fruit growers in the East—a pear called the Collins, which had not succeeded, or any stock upon which it had been grafted; had come to no fixed conclusion in reference to the subject; mentioned the grafting of the Seckel upon the apple, whereby larger fruit than the common was produced. The tree was divided in this as between the apple and pear.

Mr. Mottier was of the opinion that it had no effect; this was the result of his experiment, which was not extensive.

Mr. Mullet made some remarks to the effect that the stock had an influence upon the fruit; mentioned the Belleflower and Rawle's Jeannette, as instances.

Mr. Reily was satisfied an influence was exerted upon the graft by the stock.

Mr. Graham referred to Major Oliver's orchard, where the Seckel was grafted upon the apple—Rambo; the pears were large and partook of the flavor of the apple.

Mr. Pierson offered the following resolution, which was passed:

Resolved, That it is the opinion of this society that the stock on large trees does exert an influence upon the graft, by modifying sometimes the quality and sometimes the size of the fruit grown thereon.

Hogs for Cultivating Fruit Trees.

I have tried many receipts for cultivating fruit trees, but have found nothing equal to hogs for that purpose.

In the spring of 1858, I made a hog pen around a peach tree. I at first entertained some fears that the hogs might injure it, but I was agreeably surprised to see, in the course of a few weeks, that this tree surpassed in growth and beauty all others in my orchard, and when gathering time came it was loaded with beautiful and delicious fruit. I then began to think that Mr. Hog might be used to good advantage in cultivating fruit trees, after they have received three or four years growth; and to make the thing practical, I made the following described movable hog pen which cost me but a trifle. I took four pieces of scantling three inches

square and four feet in length, to these I nailed firmly inch plank so as to make a pen six by four feet. I then bored four inch and a half holes through the plank into the posts, two holes on each side, four inches from the bottom. I then made four pins out of seasoned white oak, with a nub on the large end to serve as a linch pin. On each of these pins, I placed a wheel one foot in diameter, made out of oak plank, two inches thick, and then drove the pins with the wheels on them into the holes, through the plank and posts and wedged them tightly on the inside. I found no difficulty in moving the pen on the wheels wherever I desired around my orchard, which is not very hilly. I then put two China pigs into the pen and pushed one end of it close up to the peach tree, where it remained until the pigs had thoroughly cleaned out the worms and insects, and had thoroughly rooted up the ground and destroyed the grass and weeds, I then moved the pen to another side of the tree, and then to another, until the little fellows had thoroughly worked and manured the ground. When this was done, I moved the pen with the pigs in it, to the next tree, and so kept on from one tree to another, until my pigs had worked about a hundred trees, which took them a little more than three months. When I came to gather my peaches, I found the fruit of these trees greatly excelled that of the trees I had worked with the spade. The trees looked healthy and smooth, and grew much faster than the others.

I have been engaged in the cultivation of fruit trees for the last eight years, and I have never found any plan to equal the above.

1. It removes the worms and insects from about the roots of the trees, and destroys the grass which harbors them.

2. It loosens the ground around the roots and promotes their growth without injuring them, which is always done, to a greater or less extent, when cultivated with a spade or other instrument.

3. It manures the tree in the right way, as it mixes the manure in with the earth.

4. It is a great saving of hard labor, which is something of an object, especially to a lazy man.

5. The difference in the quality and quantity of the fruit is increased at least one-fourth. Such is my experience. Try it and see. J. W Blakemore.

[*Adams Co. Dem. Union.*

For the Ohio Cultivator.

Seedling Peaches.

You requested me, at the Muskingum Valley Fair, last fall to give you an account of some seedling peaches which I exhibited on that occasion. I had a yellow seedling cling, which is the largest peach I cultivate, and some four Heath clings, raised from the seed; in point of size the Heaths exceeded the parent, and fully equal in flavor.

Peaches would always produce their plants, were it not that the pollen is carried by the winds or the bees, from the blossoms of one tree to those of another. This crosses the fruit, and causes different varieties to originate from the seed of the same trees. If in a field of white or yellow corn, you plant a row of red, just as far as the pollen from the tassel, is spread by the winds upon the silks of the surrounding stalks, so far the corn will be red or speckeled.

Some trees are more likely to produce their kinds than others. Instance, such as bloom earlier or later than the balance of the orchard, such as have a situation to the windward, or as stand isolated from other trees. And there are probably, causes on this subject not apparent.

As to the large, fine looking, yellow cling, which you saw, the first experiment I made with it out of some twelve or fifteen trees, they all proved true to the original with the exception of two. One was an inferior common peach, and the other was the finest looking Heath cling you saw on the table. And I think it is not improbable but I might have thrown a Heath seed with the others, which produced this peach.

I have a second experiment with these yellow peaches, with which seed I mixed a few Heath clings — a young orchard of some sixty trees. They are nearly all yellow or Heath clings. And the few that sported are far superior to the common seedling.

This yellow cling is a valuable peach. It comes after most peaches are gone, last of Sept. or first of Oct. Our amateurs prefer it for putting up to most others, And I know of no variety that will propagate from

the seed with such certainty. The Heath cling ripens about a week later, and is called an October peach. When it matures which it does not always do in this climate, it being too far north, it is the best article of the fruit kind I ever ate. I have pulled and laid them by, and had them in good eating condition for one month. From the small experiments I have made, and what I have learned from other sources, I am satisfied it will successfully propagate from the seed. Yours respectfully, &c.,

C. SPRINGER.

Meadow Farm, Feb. 1861.

The Garden.

For the Ohio Cultivator.

Rhubarb.

The Rhubarb or Pie Plant, affords the earliest material for pies and tarts, and has become in our domestic economy quite indispensible. In use just as the long keeping apples are losing their freshness, before gooseberries and currants are large enough, and continuing till frost, to yield its tender stalks. It is especially valuable in a new home, supplying the place of other fruits until they shall come into bearing, thus giving a variety to our table luxuries.

The rhubarb is produced from seed, and and the fine kinds are propagated by division of the root, observing to secure an eye or crown to each section of root. Though easily produced from seed, it is not the best way to produce a supply; for the fine sorts will not reproduce themselves, and the chances of drawing blanks are nearly as great as in some other lotteries. There is as much difference in the flavor, tenderness, productiveness, etc. of rhubarb, as of apples and othere fruits. It is much better to procure some of the large and excellent sorts now so abundant and cheap.

The rhubarb is a gross feeder and will apropriate great quantities of manure. Those who have never tried it, will be astonished at the increased size and yield, besides tenderness and finer flavor of the stalks, resulting from deep trenching and liberal use of well rotted manure, (to which crushed bones and wood ashes will prove a valuable addition.)

Rhubarb thus grown will need no peeling, the only preparation for cooking is to cut in small pieces and wash, the skin will cook perfectly tender and the flavor all the better for leaving it on. One who has become noted for his success in the cultivation of this plant, and acquired a handsome property mainly from a few acres of rhubar, thus describes his preparation of a four acre lot: Soil a rich sandy peat, naturally wet, drained and trenched to depth of three feet, incorporating large quantities of old barn yard manure, bones and offal from the slaughter houses. The size and yield after the first year or two was almost fabulous; by reason of its great size and exceeding tenderness always commanding ready sale and the highest price.

Rhubarb should be planted about four feet apart, and after the thorough preparation described, but little cultivation will be needed save loosening the soil in the spring, keeping grass and weeds subdued and removing the flower stalks as they appear. A covering of fresh stable manure three or four inches deep, applied in the autumn, before hard freezing, to be mixed with the soil in the spring loosening, will increase the vigor of the plants and insure an early growth. To have rhubarb very early, place strong old roots in half barrels or nail kegs, with good soil, keep in a warm, light cellar, or in the autumn place flour barrels with heads out, over the plants, and surround with stable manure, covering the tops with boards and manure, in early spring long stalks will be produced beautifully blanched and tender.

Rhubarb nearly or quite as good as fresh from the plants, may be had by taking well grown tender stalks, cutting in lengths of one or two inches and placing in glass jars, fill with water and place the whole in a kettle of cold water, bringing it to a boiling heat cork tightly immediately and seal with wax.

Besides the use in cooking, rhubarb is found to make an excellent wine, and is

largely planted for that purpose. If the statements as to yield are correct, and we are inclined to believe from some experiments of our own that they are, the rhubarb is likely to become the most profitable wine-producing plant we have. If people must use such a beverage, we should greatly prefer one from this to the manufactured wines so common, innocent of the juice of the grape or other fruit.

It is claimed that from one thousand to three thousand gallons of wine may be made from an acre planted in rhubarb, and five hundred dollars worth of the stalks have been sold from three-quarters of an acre.

The following are well proven, fine sorts:

Victoria (*Myatts*).—Stalks red, large and excellent, productive, nearly as early as

Linnæus (*Myatts*).—Stalks large, pink at base, excellent flavor, very early and productive. For all purposes this is now generally conceded to be the best sort.

Scotch Hybrid.—Stalks medium size, long, green and speckled, rather late, but continues in use a long time, of excellent flavor and productive.

Downing's Colossal.—Stalks red and green, large, tender and good.

Cahoon's Mammoth.—Stalks very large, pale green, tender and good, seems to be more tenacious as regards location and soil than other sorts. Where it is suited, the size and yield is enormous. We have seen stalks measuring 8 to 9 inches in circumference, and weighing when divested of leaves, two to two and three quarters pounds each.

One or two dozen roots assorted, will be sufficient for most families, through the entire spring and summer, and add a goodly number of jars to the winter stores of garden luxuries.

A. G. Hanford.

Waukesha, Wis., March, 1861.

Fairfield County.—The blue bird and pewee are on hand to tell us that spring is near. Farmers are busy making maple sugar, and seem determinsd to have a little sweetening even if Louisiana does fly off in a tangent. This spring again shows the superiority of drilled wheat over that which was sown broad-cast. It is not so badly frozen out, and looks more vigorous in every respect. Farmers are plowing sod for corn, and in this section, there will be a large crop planted. Let our corn and wheat crops be put in at the proper time, and we will soon bid adieu to hard times.

Yours respectfully,

March 15, 1861. J. P. Sain.

For the Ohio Cultivator.

Grafting Grapes.

I suppose I mnst be classed as among the "old fogies," for I am unwilling to concede any particular skill or selection of any particular roots in order to be successful in engafting the grape. More than sixteen years ago I engrafted the grape upon old standing roots and also upon small roots for planting out, I then succeeded in growing them, and have been successful with many in the years intervening. True, I occasionally fail in one, and so I do with the cherry, magnolia, or any soft wooded tree.; my practice is to cut my grafts or grape cuttings at this present season, last of February, lay them under a cloth and buried in damp sand in the cellar; when frost is out of ground in spring so that I can dig, I collect my pieces of roots from any wild vines, or from Isabella, or Catawba, as most convenient. I engraft either in the saddle or whip mode, as the root and graft seem best fitted, tie with bass matting, and plant out immediately, covering the top bud one quarter inch or so with soil, so that as it settles it will be left even with the ground.

When grafting old plants I wait until the foliage is about half grown, and then I side graft my large plants near the crown, but do not immediately cut away the old plant, this should be delayed until the graft has made a growth of one or two leaves. Tie with bass matting and earth up around, leaving only the top bud of graft exposed.

F. R. Elliott.

Cleveland, Feb. 26th, 1861.

It makes a great difference whether glasses are used over or under the nose.

For the Ohio Cultivator.

Horticultural Practice.

Cutting back Evergreens.—Those who have evergreens which they desire to grow more compactly, can easily cause them to do so by going at this season of the year and rubbing off the terminal bud from every leading side branch; do this again next year, and the result to those who have not witnessed it, will be perfectly astounding as well as satisfactory.

Evergreens are generally supposed not to be benefitted by cutting back when transplanting. Such is however not always the case, if we judge from the results of Mr. Elliott's practice. Mr. E. writes us that during the past seventeen years he has transplanted millions of evergreens, of all sizes and nearly every hardy variety, and that his best success has been when he cut back severely, as say one-half, and this especially with plants two to three feet high, received from forest clearings. Mr. E. also writes us that he has made straggling, open, unsightly White Pines of thirty feet high, close, compact pyramids of fine evergreen spray, by severe cutting back in April or May.

Laying Out of Grounds.—Nearly every man is under the impression that he can lay out his grounds, shape the walks, and arrange the planting of trees better than any one else, and therrfore he is unwilling to employ a professed architect of such work. Generally among men of good sense this impression is dissipated after one season's experience, and then they are disposed to bring in the Landscapist to try and remedy their errors. Our advice to those who are about to form new places, is to at once obtain from some capable Landscape Gardener a plan on paper showing where every tree should be placed and of what kind as well as the position of the walks, width, &c. Thus where one wants his grounds to show in after years the good effects of judicious planting, is just as essential as obtaining a plan of a house or barn before commencing to build.

Propagating Roses.—The propagating of roses is a very simple affair, as they are grown readily by many different processes. Hardy Everblooming Roses may be grown by grafting on little pieces of roots taken from any common sort, or if you have a plant on its own roots, take from the roots pieces of two inches long each, and lay them in sand, covered about an inch deep and they will, as a general thing, all grow. All hardy, as well as tender roses, can be grown in this way, while Bourbons, Teas, Noisettes and all the climbing sorts can readily be grown by cuttings. The hardy sorts should be placed in the ground early in the spring, same as grapes, while the Bourbons, Teas and Noisettes are better or rather easier grown, by taking cuttings in July and August and planting them in a sandy loam, border sloping to the north, and shaded from the sun's rays after 10 o'clock, A. M.

Sprouting Onion Seed.

"How is it you raise so large and nice onions?" I asked of an Iowa farmer, as I was sitting at the table with him, and observing some on the table.

"Well," said he, "we sprout the seed with boiling water, and then plant it early and in good ground."

"Sprout the seed in boiling water?" I exclaimed inquiringly. "What do you mean, sir, by that? Won't boiling water kill the seed?"

"Not at all," he replied, "but it will sprout them in one minute's time."

"It will? It looks incredible!" I replied with surprise.

"Well, you try it," he replied grinningly, "when the time comes to plant, and you'll find it just as I tell you."

And sure enough, when spring came, and my neighbor was planting his onion seed, and being present, I said:

"Jewell, last winter there was a man told me in Iowa, that to pour boiling water on black onion seed would sprout them in one minute. Suppose you try it?"

"Very well," said he. And taking the tea kettle boiling from the stove, he poured the water thus boiling on the seed, which he had in a tea saucer. Looking closely at it for a moment he exclaimed, "My conscience! you have told rightly. Only look there!"

I looked, and behold, the little sprouts, about as large as horse hairs were shooting out of the opened ends of the seed! He did not retain the water on the seed above three seconds, and in less than one half minute after it was poured off, the sprouts were projecting from the seeds.

My Iowa friend assured me that this process would advance the growth of the onion from two to three weeks beyond the ordinary method of planting without sprouting.

Home Department.

MRS. FRANCES D. GAGE, EDITOR.

Make Home Beautiful.

We take up exchange after exchange and find those words staring us in the face. "Make Home Beautiful!" The advice is good, but how is it to be done? is asked by the thousands who have slumbering in their hearts a tiny germ of hope that may be cultured into active and vigorous life; but which, like the seed in its paper wrapper, will remain only a seed till all life and vitality is gone out of it, if something is not done to give it growth. Now let me make a suggestion—Spring is coming, resolve to give the merry maiden a cheerful welcome. As soon as she flies over your hill-sides, dropping her gems of beauty, let your children go to the woods and fields; do not discourage them, give them an old knife and bid them bring home some of the roots of the flowers which they love so well; take a moment busy mother, and show them how to transplant these roots by the door, not so much for the flower itself, as for the culture it gives the children. Try it and see how they will watch and care for them, and perchance a half hour thus spent in the open air among the soft breezes of spring, will renew your own health and vigor. Has your home looked gloomy, the indoor labor hard, and monotonous? This will vary it. Look up at the bright sky, and down at the happy faces of the children: tell them of God and the violets, and how he bestrews them all about the world, to make it lovely. Look back to your own childhood, and some pleasant memory will come like an unbidden spirit, and stand before you, asking you to tell the tale to your little ones, and they will listen, oh! how interestedly, if it was something "*Ma* did her own self."

Before you are aware, you will have planted a flower by your door, and dropped more than one seed of good in the hearts of your children —those little bounding, glad hearts, where the soil is so rich and fertile, so full of the damp freshness of life's spring time, that it will need only your warm sunny smile to fructify them and send their roots down deep, excluding the vile weeds that might find place but for their presence.

This will be a first step toward making home beautiful, put the light in the heart and its rays will penetrate throughout the home.

For the Ohio Cultivator.

The Hang Bird's Nest.

TO A BEREAVED MOTHER—BY FRANCES D. GAGE.

Walking down the street to-day,
With my busy thought at play,
Spied I on an old elm tree,
Pendant 'mong the branches free,
Hung with diamond spangles bright,
Sparkling in the wintry light,
Tossing, with a sad unrest,
Summer's empty Hang Bird's nest.

Where were all the twittering birds,
With their little love-linked words?
Far away to southern homes,
Where no chilling frost wind comes,
They have flown on cheerful wing,
Still to love and still to sing,
'Mong the fragrant orange bowers,
'Mong the spicy fruits and flowers,
There to flit, the livelong day,
Warbling all their joy away.
God hath taught them, and they go
Where no wintry winds e'er blow;
While the last year's frosted nest,
Seems to tell us He knows best.

Mother! lift thine aching head
From that empty cradle bed;
Let the idle words I sing,
To thy spirit comfort bring.
He who taught the birds to fly
To a sunnier clime and sky,
Hath He not, grieved one, for you,
Care as deep and love as true?
He hath called thy pet away
From some chilling wintry day.
Gone, a little while before thee,
Wait in faith, He will restore thee
To thy darling, on that shore
Where the frosts will come no more,
And welcome thee to endless rest,
Singing,—"Mother, God knew best."

For the Ohio Cultivator.

A Dream of Home.

BY CARRIE CLARK PENNOCK.

I stood upon a hill, a little hill,
That overlooked my childhood's happy home,
Where, like a nest among the tall old trees,
The moss-roofed cottage reared its humble head.
Much looked it as of old; the blue smoke curled
In lazy circles on the morning air,
Like incense from a censer; and the brook
Still kept its onward course, while from the bank
The maple bent as loving as of yore,
And paid its golden tribute to the stream.
The willows had shot upward rank and tall,
And waved their lithe and sinewy arms in air,
Or, like a wanton lover, dallied oft
With the fair face that mirrored back its own.
The robins and the wrens, familiar grown
With face and shrub and tree, built, as of old,
In the accustomed haunts, and from the eaves
The swallow twittered all the livelong day.

Beside the open door the lilac bloomed,
Luxurious as its wont; and on the steps
Two little girls, with flaxen ringlets, played,
And dreamed away the first sweet dream of youth.
Yet much I wondered, as I nearer drew,
Why stayed the step I so much loved to hear.
Why came my mother with no heaven-born kiss,
And smile of love, to greet the wanderer home?
'Twas more than strange, for oft in years agone,
When homeward bound, I trod the selfsame path,
Her voice was first to greet me; her caress,
Itself a blessing, first upon my brow.

Now all was still and hushed; the very air
Came laden with a stifling sense of ill,
That checked each quickening impulse of the heart
And shadowed, like a swift and threatening cloud,
In one brief moment, all my morning sky.
I knew she was not there; upon the hearth
Her chair stood vacant, and her Bible lay
Not in the accustomed place.
They whispered what they need not; she was dead!
And o'er her grave, that low and hallowed spot,
The Mecca of my spirit's pilgrimage,
The sun, and storm, and winds, of twelve long months,
Had swept unheeded by. I spake no word,
But silent, on the threshhold sat me down,
And wept such burning tears, as only those
Who mourn a mother's loss, can ever know.

O! there are hours when all the deep, dark woe,
And weary wretchedness, and grief of years,
Crowd into moments; like the pent-up storm,
Reaping new vigor from its transient lull—
And troubling deep the waters of the soul,
That long had basked in cloudless sky and calm.
'Twas changed in all; new faces and new ties,
New hopes, new loves had supervened the old;
And now, upon the hearth where oft of yore
She sang my lullaby, and clasped my hands
In childish prayer, alone I sadly stood,
An orphan, and a stranger; and I turned,
And with a stricken heart sought one low grave,
Where I might kneel me down to weep and pray.

For the Ohio Cultivator.

The Swearer.

"Don't swear at me, Henry, sit down by the fire and I will get some wood." Her eyes looked dim, and brimful of sorrow, and I saw a tear fall on her bosom as she passed out at the door. She came back trying to look pleasant and put the wood on the fire. In a moment the white flames went hurrying up the flue. The room grew warmer which had not been cold; but that harsh oath swept over Mary's heart like a December blast over a bank of violets.

"Take it papa, take it," said a little moon-faced boy of two years, jumping up and down before his father's knee. An oath and a command to sit in his little chair responded. The little fellow looked disappointed down on the carpet, then turned away stammering wonderingly the oath he had just heard. Oh pure little spirit! I pity you. A mildew which your wee hands cannot battle with, will blight you. Oh sweet laughing lips! beautiful enough for angels to kiss, must you be tainted by profanity? How many times must the patient mother say, "Willie must not say such words," and weep, before he will learn the wrong which they conceal.

The husband went out again to his work; the parting word was a wicked one, the air of the whole house was exhaled sighs; the young wife bowed her head and kissed the little flower so roughly treated. Tears blistered her heart, and a recollection of the deep tenderness which blessed her childhood rilled swiftly for a moment, and then like a hot lava tide, consuming the still waters, came the memory of those cankering words from him for whom she had left all. Nothing so crushing, nothing which makes the heart writhe in such agony as to have it made the mark for the shafts of profanity to pierce. It will struggle, and pray, and hope, and despair, until amendment comes or else love dies.

Oaths! they are black spots on the face of our beautiful English? Do not use them they will turn your heart to stone, and dry up every fount of tenderness.

EMMA TUTTLE.

The Housekeeper.

Stewed Beef.

Housewives who are in a habit of using only steaks and roasts, make a great mistake. A capital dish may be made out of the "chuck" as the butchers call it, or the neck, when well prepared, Select a piece of meat as large as the demand of your table may require, wash it well to remove all the blood or soil from the outside, have your dinner pot perfectly clean, salt and pepper the meat well, lay it in the bottom and cover it with water; boil it from two to three hours, or till it is thoroughly tender; add half an onion, a sprinkle of sage, thyme or summer savory.

If the meat is fat, let the water all stew out a half hour before it is put on the table, and when your meat is browned well on the lower side in the gravy, turn it over and brown the other side. When ready, take it up, add a little flour thickening to the gravy, or if you have a dredge box shake the flour into the hot gravy and brown it, then add boiling water, and you will have a dish equal, and to my mind superior to the common roast beef, upon boarding house tables.

Care must be used to turn it; and equally necessary is good judgment in having it thoroughly well cooked. F. D. G.

Hurry Cakes.

"I'm never in a hurry," says Mrs. Clipper, "so your hurry cakes are of no account in my family. I never let my bread bowl get empty, not I." Well, Mrs. Clipper, I guess if you had our folks to cook for, you'd tell a differeat story; sometimes there is ten, and sometimes twenty. I baked fourteen loaves last Saturday, and as sure as you're alive there wasn't enough left to do for breakfast Monday morning. I was beat, but I says to Susie, says I, we'll get up a cake in a hurry — run and get me some butter-milk. I took two quarts in a pan, dropped in a bit of lard as big as a hen's egg, (not a Shanghai's either,) two eggs, a ttle salt, and then stirred in flour till it was as thick as I could manage it with a spoon. By the way, I rolled two common sized teaspoonfuls of soda into the flour, so it was all well mixed together, greased my bake pans well, and dropped the dough from the spoon in small round lumps, as they fell from the spoon, dipping it in milk each time; clapped them in the oven, and in fifteen minutes they were ready for the table. No daubing the hands as in making biscuit, no rolling pin to be taken down, cleaned or hung up, no biscuit cutter to be hunted for, no bread board to be washed; and with butter and sorghum molasses, they are equal to griddle cakes; and what is better than all, no roasting over the stove to cook, while others eat. Susie calls them Hurry Cakes, you may call them Drop Muffins.

There is but one objection to them; they are so good that they are all gone before you know it, and the cry is—Hurry up your Cakes! F. D. G.

Gapes in Chickens.

Several inquiries have come to us about the Gapes of Chickens, and the best remedies for that disease. It is my impression that the REMEDY must be most in prevention. Old hen houses and old barns originate this fatal trouble to the young peepers. Give your hens new barns or clean out all the nests and houses, white-wash, scrape the old dirt and pitch out down to the fresh soil, and the gapes will not trouble your young broods to any extent.

If you have no special places for your fowls and they roost on your trees, and make nests in the old sheds, or wood houses, let the work of renovation begin at once. I have seen under the trees in a door yard, deposits of hen manure, sufficient to enrich a whole kitchen garden. Take hold of this matter. It will prove like old Falstaff's sack, to have a two-fold operation in it. You will clean up your yards and barns, enrich your gardens and borders, and save your chicks. F. D. G.

"I feel" said an old lady "that I've got about through with this world. I shan't enjoy much more trouble."

Poem of Imagination.

For the Ohio Cultivator.

A Forewarning.

Blow while you may,
Wild winds to-day,
Bear all the last year leaves away;
With fold on fold,
Wrap sky and wold,
O! clouds, with mantles gray and cold.

Oaks lift your arms,
And sigh alarms,
Round all the bare and breezy farms:
"How long! how long!
Till winged song
Shall to my leafy coverts throng?"

So much for one,
Who 'neath the sun
Seeth his race so nearly run,
Who quakes and fears
As April peers
From out the clouds, 'twixt smiles and tears.

With purple face,
But haughty grace,
March rides upon the winds apace.
He hurries by
With many a sigh,
And gazes wistful on the sky;

As well he might,
For by the light
Of morn, I saw the fairest sight—
'Twas just at dawn,
As Night put on
Her sandals, hasting to be gone.

Faint purple streaks
On mountain peaks,
Show the path Apollo seeks;
Cloud peaks that rise
Against the skies,
Dreamlike and fair as Paradise.

Within, a lake
Whose pure depths take
No stain from tiniest cloudlet flake,
On either hand
Bold cloud cliffs stand,
The gateway to a fairy land.

Still on, it seemed,
Or else I dreamed, [gleamed,
That more lakes 'mong the mountains
That verdant isles,
Like heavenly smiles,
Dimpled the blue, translucent miles,

That one by one,
White peaks put on
The crimson of the coming sun;
And grandly stood,
A Titan brood,
All mirrored in that waveless flood.

On either side
This happy tide,
Eternal spring-time doth abide—
With flowers o'erspread,
Fields incense shed,
And branching forests tower o'erhead.

And blue lagoons
In wimpling flumes,
Flash up among the feathery blooms;
And, ranks on ranks,
Upon their banks,
White lilies crowd to offer thanks.

I look again—
A smiling plain,
Thick covered with the springing grain—
The soft south breeze,
The wanton bees
Are toying with the blossoming trees.

'Mid clover blooms,
And violet glooms,
Sense, sick with rapture, sinks and swoons;
While soft winds come
With murmurous hum,
From scented thickets of the plum,

Whose robes of snow,
The blackbirds know,
When with their clamorous choirs they go,
From feathery spray
To fill the day
With their sweet spring-tide roundelay.

The blue bird thrills
Some dainty trills,
And all the blossoming orchard fills,
While all the grove
O'erflows with love,
When coos her plaint the turtle dove.

The willows gleam
Along the stream—
Ah well! it was a pleasant dream—
An instant more,
The fairy shore
With thick gray mist was covered o'er;

An icy sigh
Came stealing by,
Dim spectres flitted through the sky—
I turned, and there
With snowy hair,
March stood and pointed in the air.

Stride, spectre, on!
The pageant's gone,
With clouds enwrap the sky so wan;
Thou'rt near thy goal—
Pray for thy soul,
That sweet forewarning is thy dole.

March, 1861. RUTH CRAYNE.

WOMAN BY A SICK MAN'S COUCH.—It has often been truly remarked that in sickness there is no hand like a woman's hand—no heart like a woman's heart—no eye so untiring—no hope so fervent. Woman by a sick man's couch is divinity impersonated.

For the Ohio Cultivator.

The White Pants.

"Oh, mother! won't you make me some white pants, like Ed's and Sam's?"

"Why, my dear, what do you wish to have white pants for?"

"O! because every body says how nice they look. Mrs. Ray called 'em just now, and kissed 'em both, and give 'em a cooky, 'cause she said they looked so pretty in their clean white pants. Say, ma, won't you make me some?"

"Yes, Willie, if I can get time; but don't tease me now."

Willie looked disappointed, but he went to his play for that time. But in a day or two, he again begged his mother for the white pants.

Ed and Sam were twins, and the only children of parents who were very fond of seeing them look pretty. Their mother kept them in nice clothes, and never let them out upon the street, except when they were in perfect order.

A day or two after Willie had been so attracted by the white pants, the boys came to make him a visit, and though it was a pleasant summer day, they seemed inclined to stay in the house. Willie brought out all his playthings, made block houses, set his ship for a sail, made pictures on the slate, and all the time he kept wishing in his heart for the white pants.

At last, weary with all other things, he took out his Barlow knife for a game of mumblepeg, as the boys called it; but Willie's mother said they must not toss their knives on her new carpet, as it might cut the threads; the summer-house would be better, as it was cool and shady, and they might laugh as loud as they liked, for it would not wake baby.

"Our mother won't let us play out-doors without we stand up all the time," said Ed.

"Why?" asked Will.

"'Cause the grass will dirty our white pants; we have to stand up every minute when we're out-doors."

"Oh, pshaw!" said Will, "I don't believe she'll care—just in the summer-house—it's so clean and sweet out there, and it's all covered with roses."

"Let's go," said Sam, his eyes dancing with pleasure at the thought of the roses.

"No, no, Sam! we'll both get a whipping if we do, for grass stains and makes mother so much trouble. No, no, Will, we'll sit here." And the poor little fellow drew a long breath and gave a longing look towards the sunshine, roses and blue birds, and then threw himself upon the sofa with great care, lest he should spoil the crimp of his ruffles.

Will got out the books and pictures, but there was no sport, for their little hearts were all out-doors.

The next day Will stood by his mother, and put his arm round her neck; he was thinking how good she was to him. She thought he had something to say, and waited till he was ready to say it. At last it came:

"Mother, you need not make me any white pants. I'd rather wear patches than have to sit in the house all the time for fear of a whipping; and I'd rather be whipped than make you so much trouble."

The white pants were never made. Will grew up to be a strong, tall man, did not get much praise for his clothes, but he had health and strength. AUNT FANNY.

For the Ohio Cultivator.

Willie's Complaint.

BY MRS. F. D. GAGE.

"Mama, you said, the other day,
'Twould soon be merry Spring,
That pretty flowers would bloom so gay,
And pretty birds would sing.
You said the little lambs would skip
Down by the meadow brook,
And I might go with Kate, and trip
A minnow with my hook.

"But now just hear the cold winds blow!
See how the great flakes fall!
The meadow field is white with snow,
The birds don't sing at all.
And oh! ma'ma, my side aches so,
My hands are cold to-day;
When Spring comes, ma'ma, may I go
And have that promised play?"

Dear Willie! ere the snows of March
Had melted from the plain,
They laid him 'neath the bending larch,
Free from his ache and pain.
And when the sunny hours shall bring
Again the buds and flowers,
Sweet Willie, far away, shall sing
In heaven's unfading bowers.

Advertisements.

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For dipping Sheep and Lambs, and for destroying all kinds of Vermin, on other animals.

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Its use not only removes the vermin on animals, but cleanses and purifies the skin, thereby materially benefitting their general health, and greatly improving wool, both in quality and quantity.

This article completely supersedes that laborious and disagreeable work of preparation in your own buildings for sheep-washing, as it is ready at all times, in any climate, and for all descriptions of Sheep, even for Ewes in lamb, and can be furnished at a much reduced cost.

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THE CONCORD GRAPE will beat the Delaware three to one in vigor of growth and size of fruit, and will, no doubt, become the most popular among the Million, for market, etc., although the Delaware is the favorite of the Upper Ten Thousand.

Fine roots of both are for sale at the Columbus Nursery, Concord at 75c to $1 each, Delaware $1 to $2—the latter rate for strong 2 years old roots.

March 20. BATEHAM, HANFORD & CO.

Ornamental Trees and Shrubs.

WE have a large assortment of very fine Shade and Ornamental Trees, for lawns, etc., comprising amongst them :

Weeping Poplars, Purple Beech,
" Mountain Ash, Oak leaved Mountain Ash.
" Elms Viminalis, Cut leaved Birch,
" Willow, New Amer. Red flowering Horse Chest-
" " Kilmarnock, nut,
Rosemary leaved Willow, Double flowering, etc., etc.

FAHNESTOCK & BAKER.

Toledo, Ohio, March 7, 1861.

SCHENECTADY Agricultural Works!

THE subscribers, proprietors of the above works manufacture 4 to 10 horse Lever Powers, one, two and three horse Endless Chain Powers, combined Threshers and Cleaners, Threshers with vibratory Separators, Clover Hullers, Wood Saws, etc., a full description of which may be found in their illustrated circular, which will be mailed free to all applicants.

The following is an extract from a letter written by a man who purchased one of our Two Horse Powers and Thresher and Cleaner last season :

Osceola, Illinois, Feb. 19, 1861.

G. Westinghouse & Co :

We threshed with your machine last summer and fall 10,000 bushels wheat at 4c per bushel, and about 4,000 bushels oats at 2c. The greatest number of bushels we threshed of wheat in one day, was 260, commencing about 9 A. M., but generally our day's work was from 150 to 200 bushels, according to yield per acre. We threshed 530 bushels of oats in one day, and when oats were good, averaged about 500 bushels per day. The machine is generally well liked. S. M. HILL.

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H. B. LUM, SANDUSKY, O., WILL sell Lawton Blackberries, fine and genuine, at $4 per 100, $30 per 1000. Kirtland Raspberries, very hardy and fine, $3 per 100, $20 per 1000. Houghton Seedling Gooseberries, bearing plants, $1 per dozen. Wilson's Albany. Trollope's Victoria, Scarlet Magnate, Hooker, and other Strawberries, $1 per 100.

Roses, Pæonies, Flowering Shrubs, Ornamental Vines and Plants, 25 cts. each. Verbenas, Pansies Daisies, Polyanthus, in variety, $1 per doz. Cartalogues gratis.

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DWARF FRUIT TREES.

DWARF PEARS of the finest varieties, two and three years from graft, at low prices.

DWARF APPLES are now becoming quite popular as companions for the pears. We have a fine assortment, (on paradise stocks) most of them 3 years old and ready to commence bearing.

DWARF CHERRIES—Fine trees, 2 and 3 years old, mostly Duke and Morello varieties, including a fine stock of the Early May, the best of all cherries for this climate. Prices of the above reduced to 40 cents each.

☞ Send for the New Descriptive Catalogue of the Columbus Nursery. BATEHAM, HANFORD & CO.

March 20th. 2t

Trees, Trees.

WE OFFER TO DEALERS AND OTHers 25,000 Apple Trees, 3,000 Peach Trees, 4,000 Cherry Trees, 2,000 Pear Trees, Plums, Apricots, Quinces, Raspberries, Gooseberries, Blackberries, Strawberries, Currants, Grape Vines, etc. Also, 20,000 American Arbor Vitæ, fine for ornamental hedges ; 5,000 Norway Spruce, White Pine, European Larch, Mountain Ash, and a variety of other stuff—just what young nurserymen would want ; also, 10,000 young grafted Apple trees at $20 per thousand.

All the above stock, healthy and well grown ; embracing a fine assortment of Dwarf Trees. Send for Catalogue. S. B. MARSHALL,
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Sweet Potatoes for Seed.

ON RECEIPT OF $4, WE WILL SHIP to order 2½ bushels of Lebanon Yellow Sweet Potatoes, in good order, on Muskingum River, and also send a circular giving instructions how to cultivate and keep over winter. Be particular in giving instructions how to direct the barrel.

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MY COLLECTION OF THIS BEAUTIful flower is unsurpassed by any. New sorts at $3 per dozen ; older sorts, but equally good, $2 per dozen ; $12 per hundred, packed so as to go by express.

Address JOHN GRAVETT,
c4-f9 Lancaster, O.

MARKETS.

New York Cattle Market.

A large receipt of beeves, amounting to 4,549 head, has depressed the market, which is nearly one cent lower than last week. Prices range from 6 to 9c. Sheep 50c per head lower; sales 5 to 6c.

New York Market.

Flour—Less doing, and market scarcely so firm. Prices, however, are without important change—$5.05@5.515 for superfine Western; $5.20@5.45 for common to medium extra Western; $5.50@5.60 for shipping brands extra round hoop Ohio; $5 70@7.00 for trade brands do.; market closing very quiet.

Wheat—Market may be quoted quite firm, with a slight upward tendency in prices; the export demand continues good. Winter Red Western at $1.31 in store; White Western at $1.44@1.45, and choice Kentucky White at $1.65.

Corn—Market firm, particularly for new, of which there is a limited supply; sales at 66½c for old Mixed Western, in store, including 1,000 bushels at 68c; new Mixed Western and Yellow, at railroad depot, at 61@03c—the latter price for choice.

Oats—In moderate request at 32½@33½c for Western

Hogs—Quiet and firm at 7@7¼c for city dressed; $5.50@5.80 for live weight.

Butter—Selling at 10@14c for Ohio, and 14@19c for State.

Cheese—Steady at 8@10c for inferior to prime.

Cincinnati Market.

Flour—The demand for superfine continues good and the market firm at $4.50@4.60, but there is very little demand for extra.

Cheese—The demand continues moderate at 8½c for W. R., 9c for Hamburg, and 10½c for E. D.; sales 100 boxes W. R. at 8½c.

Hay—The market is steady, at $12@13 per ton for prime Timothy, in bales.

Potatoes—Prime Neshannocks are in good demand, at $1.25@1.35 per barrel

Seed—Clover in good demand, at $4.75 for prime. Timothy is firm at $2.80 for prime in the small way, from store; it is selling at $2.90@3.

Wheat is firm and in good demand at $1 for prime red, $1 05 for prime Indiana white, and $1.08@1.10 for prime Kentucky white.

Corn—Ear is in active demand at 30@33c, and holders are generally asking an advance of 1c per bushel. Shelled at 33@35c for mixed and white, in bulk.

Oats—Common are dull and in but limited demand, at 26½c in bulk; choice are wanted at 29@30c.

Rye—Dull and firm, closing at 58c for prime

Barley—Prime fall is scarce and in good demand, but other grades are dull; we quote prime fall at 70@72c, and prime spring at 60@62c.

Butter—Prime and choice roll is in light supply, and prices advanced 1c per pound, closing at 15@17c for prime to choice; common qualities dull.

Apples—The demand is fair at $1.25@1.75 per bbl. for common to prime, and $2 for choice.

Garden, Field and other Seeds.

EVERY DESCRIPTION OF GARDEN, Field, Flower, Fruit and other Tree and Shrub Seeds, all of the most reliable character, fresh and true to their kind, both of American and foreign growth.

Orders by mail promptly filled.

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Agricultural and Horticultural Implements of every kind, the lastest and most approved patterns.

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